ZS-X7

SERVICE MANUAL

Ver 1.0 1999.10

US Model
Canadian Model

Model Name Using Similar Mechanism	ZS-D50
CD Mechanism Type	CDM-2411AAA
Optical Pick-up Type	DAX-01A2

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS
POWER OUTPUT AND TOTAL HARMONIC DISTORTION
With 6-ohm loads, both channels driven from 100 - 15,000 Hz; rated 2.3 W per channel-minimum RMS power, with no more than 10 % total harmonic distortion in AC operation.

Other Specifications
CD player section
System Compact disc digital audio system
Laser diode properties
Material: GaAlAs
Wave length: 780 nm
Emission duration: Continuous
Laser output: Less than 44.6 µW
(This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)
Spindle speed
200 r/min (rpm) to 500 r/min (rpm) (CLV)
Number of channels
2
Frequency response
20 - 20,000 Hz +0/–0.5 dB
Wow and flutter
Below measurable limit

Radio section
Frequency range
FM: 87.6 - 108 MHz
AM: 530 - 1,710 kHz
Antennas
FM: Telescopic antenna
AM: Built-in ferrite bar antenna

General
Speaker Full range: 8 cm (3 ¼ inches) dia., 6 ohms, cone type (2)
Passive radiator: 12 x 6 cm (4 ¾ x 2 ⅜ inches)
Outputs Headphones jack (stereo minijack)
For 16 - 68 ohms impedance headphones
Power output (excluding US model)
4.5 W + 4.5 W (at 6 ohms, 10 % harmonic distortion in DC operation)
Power requirements
For personal audio system:
DC IN 10.6 – 12 V jack accepts:
Supplied AC power adaptor (AC-E700) for use with 120 V AC, 60 Hz
Supplied car battery cord (DCC-EC12) for use with 12 V car battery
9 V DC, 6 size D (R20) batteries
For memory back-up:
4.5 V DC, 3 size AA (R6) batteries
Power consumption
AC 18 W

— Continued on page 2 —

PERSONAL AUDIO SYSTEM

MICROFILM

SONY®

Battery life

For personal audio system:

FM playing
Sony manganese SUM-1 (N): approx. 10 h
Sony alkaline AM-1 (N): approx. 24 h
CD playback
Sony manganese SUM-1 (N): approx. 1.5 h
Sony alkaline AM-1 (N) : approx. 3.5 h

Dimensions

Approx. 576 x 195 x 183 mm (w/h/d)
(22 ¾ x 7 ¾ x 7 ¼ inches) (incl. projecting parts)

Mass Approx. 3.2 kg (7 lb. 1 oz.) (incl. batteries)

Supplied accessories

AC power adaptor AC-E700 (1)
Car battery cord DCC-EC12 (1)
Spare fuse (1)
Shoulder strap (1)
Screws (2)

Design and specifications are subject to change without notice.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

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SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1
SERVICE NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

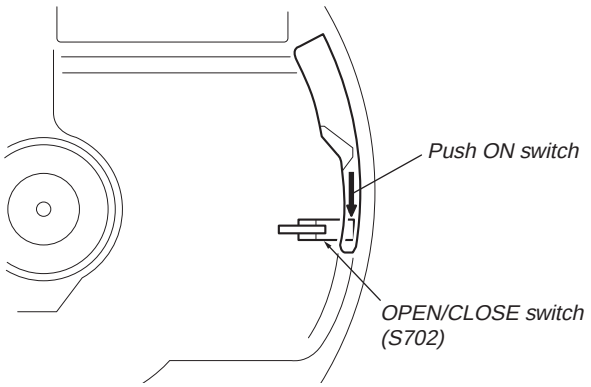
The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe more than 30 cm away from the objective lens.

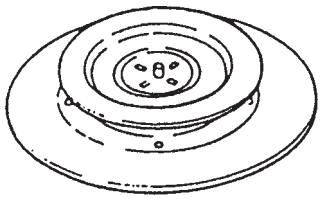
LASER DIODE AND FOCUS SEARCH OPERATION CHECK

1. Open the lid for CD.
2. Push ON OPEN/CLOSE switch (S702) as following figure.
3. Press CD ►II button.
4. Confirm the laser diode emission while observing the objecting lens. When there is no emission, Auto Power Control circuit or Optical Pick-up is broken.
   Objective lens moves up and down once for the focus search.



CHUCK PLATE JIG ON REPAIRING

On repairing CD section, playing a disc without the CD lid, use Chuck Plate Jig.
• Code number of Chuck Plate Jig : X-4918-255-1

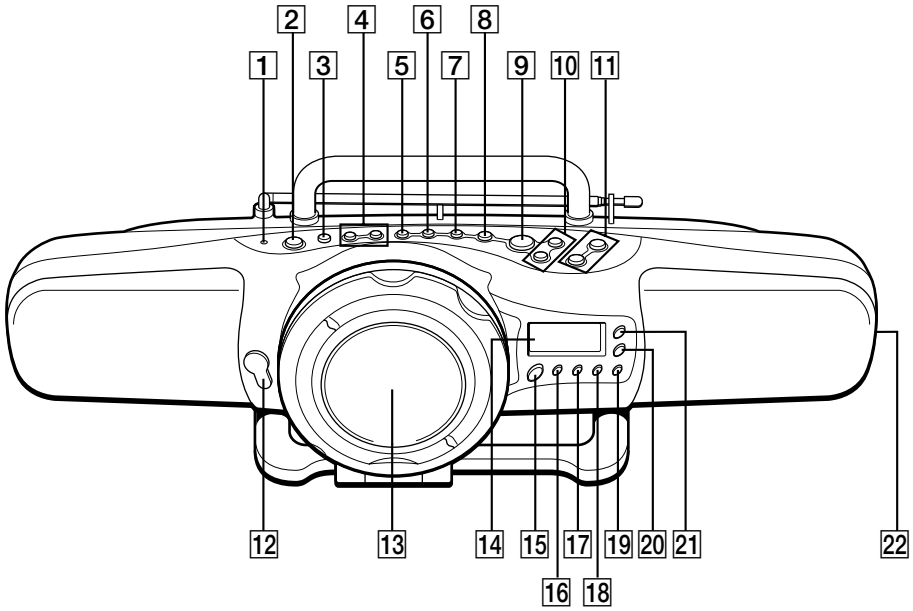


SECTION 2
GENERAL

This section is extracted from instruction manual.

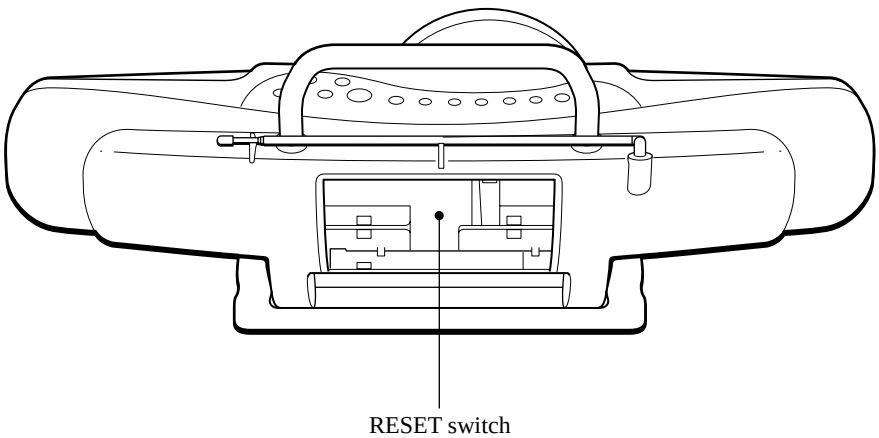
LOCATION AND FUNCTION OF CONTROLS

FRONT PANEL



1. OPR/BATT indicator
2. POWER button
3. BAND button
4. PRESET +/ – buttons
5. DISPLAY, ENTER button
6. MONO/ST, MODE button
7. ESP button
8. ■ (STOP) button
9. ▶II (play/pause) button
10. TIME SET, TUNING buttons
    - ▶▶| +
    - |◀◀ –
11. VOL +/ – buttons
12. ∩ jack
13. CD lid
14. Display window
15. CLOCK button
16. TIMER button
17. STANDBY button
18. SLEEP button
19. ALARM button
20. MEGA BASS button
21. SOUND button
22. DC IN (10.6 – 12V) jack

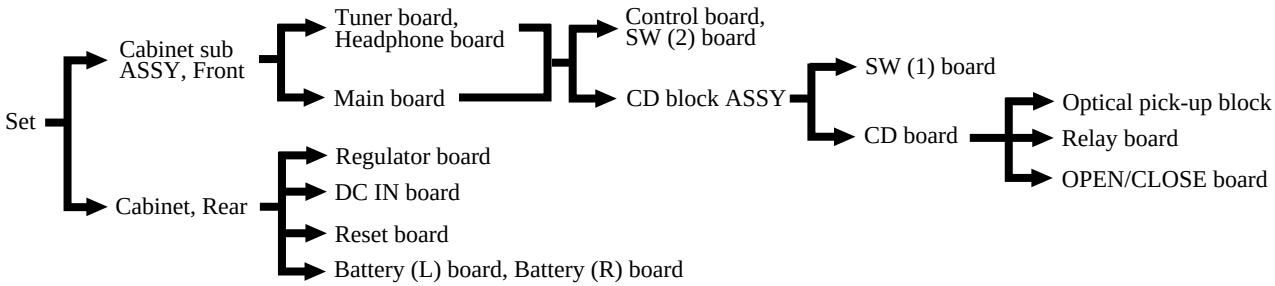
REAR PANEL



The player uses a built-in micro computer for its various operations. Due to change in power supply conditions, etc., operation may sometimes become unstable. After trying the above remedies, if the player still does not function properly, press PRESET in the battery compartment with a pointed material.

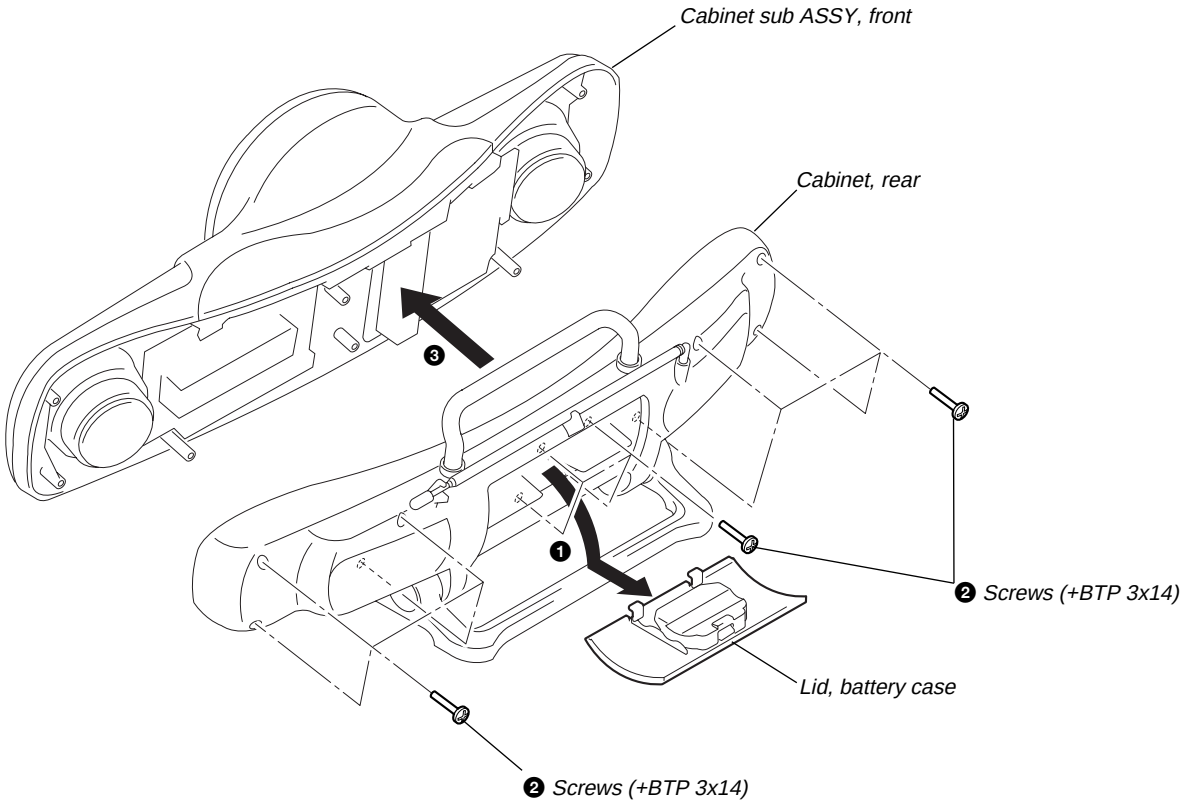
SECTION 3
DISASSEMBLY

● The equipment can be removed using the following procedure.



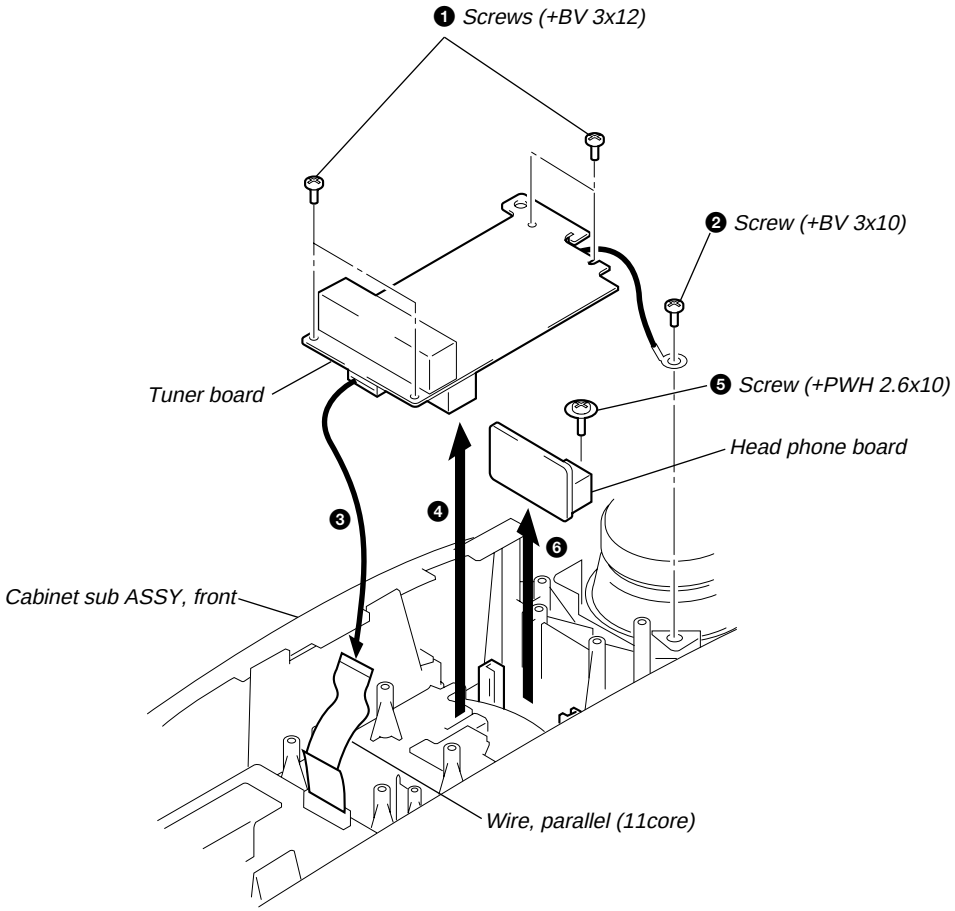
Note : Follow the disassembly procedure in the numerical order given.

3-1. "CABINET SUB ASSY, FRONT", "CABINET, REAR"

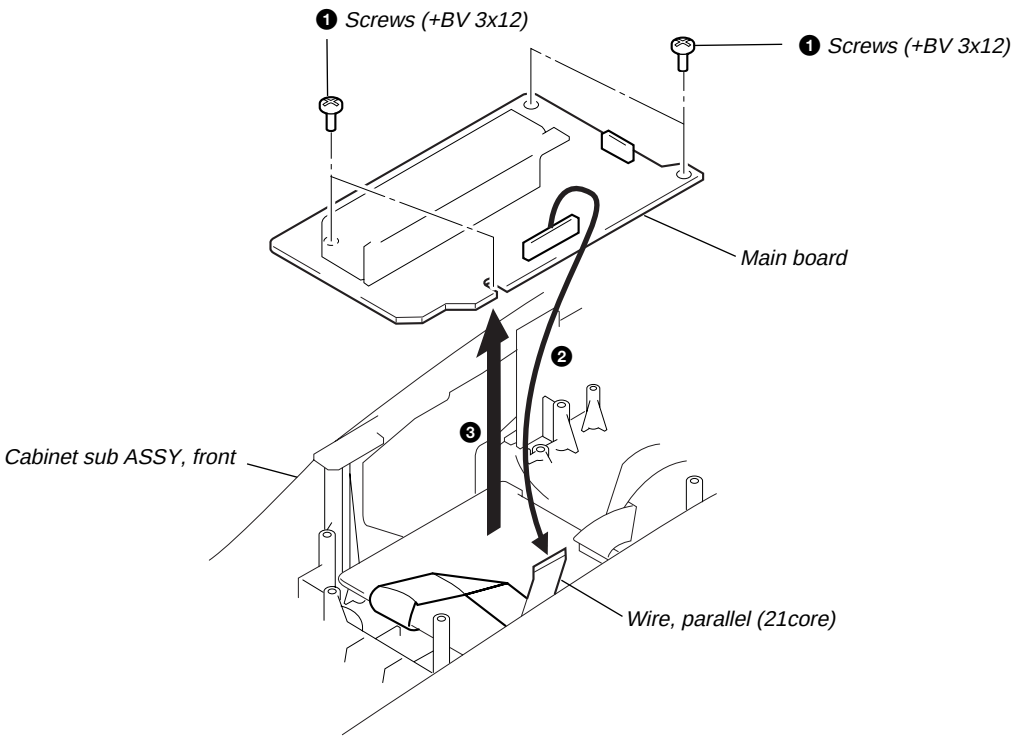


< “CABINET SUB ASSY, FRONT” SECTION>

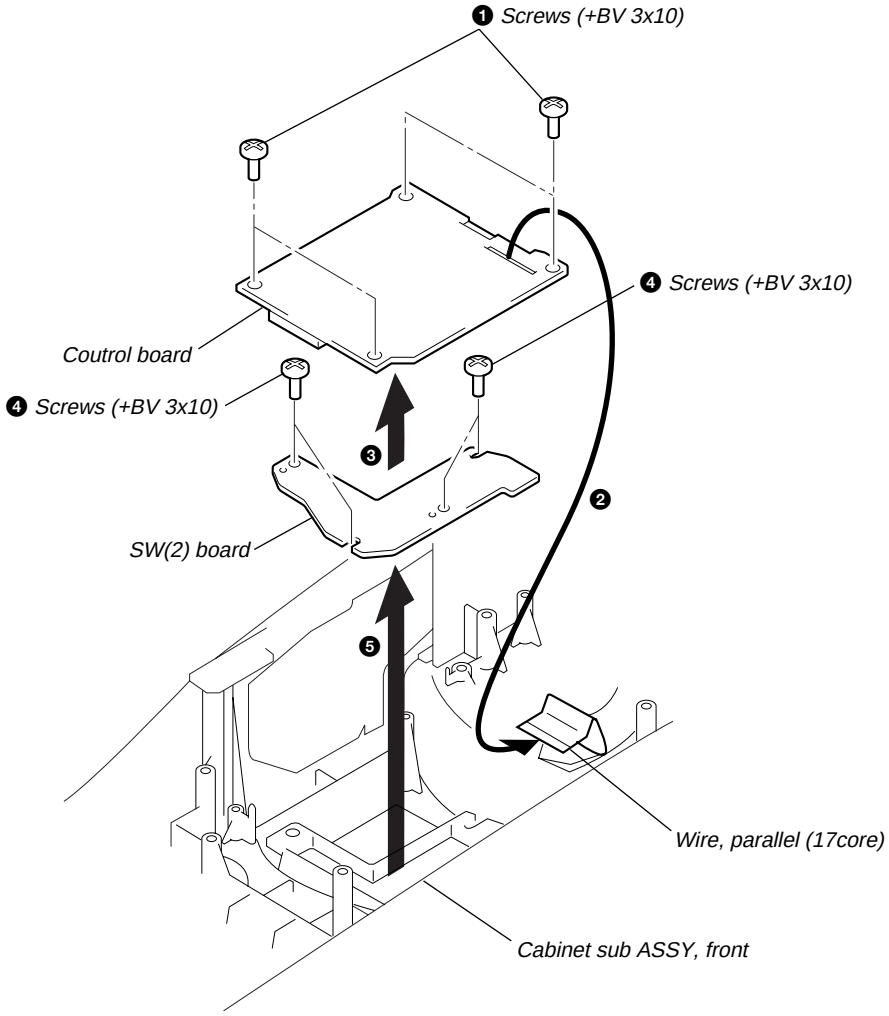
3-2. TUNER BOARD, HEADPHONE BOARD



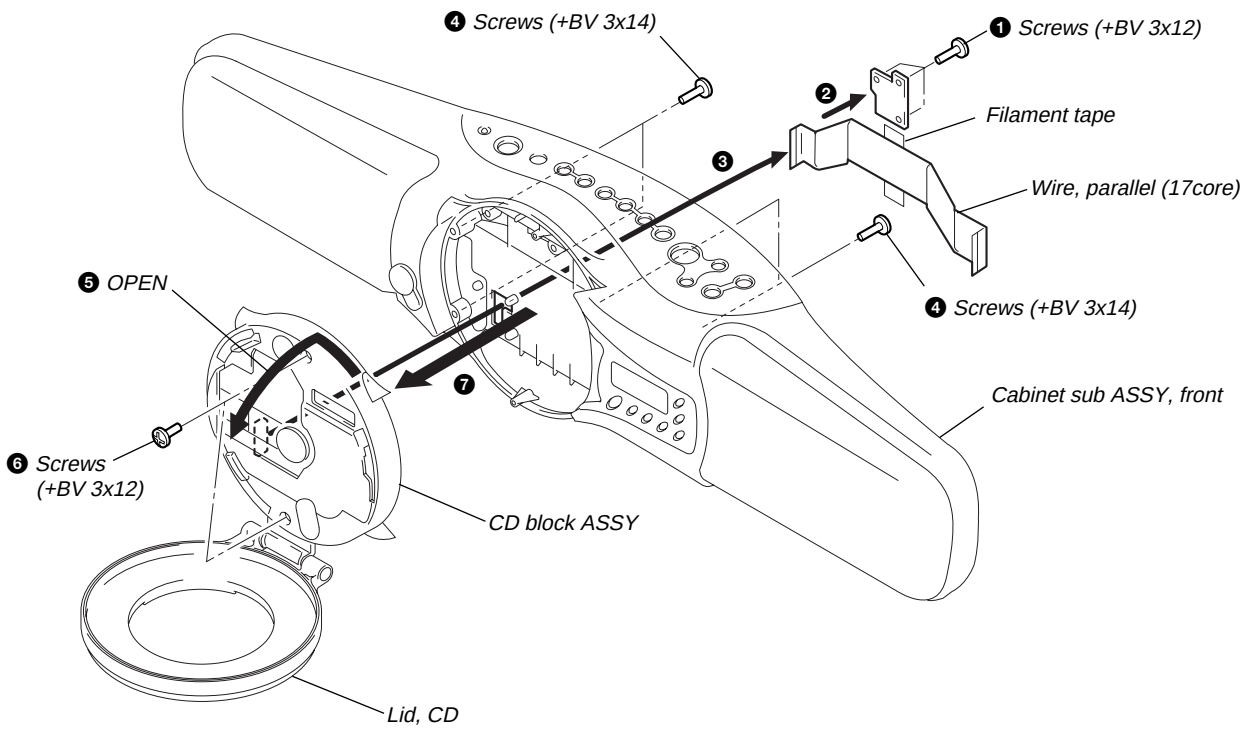
3-3. MAIN BOARD



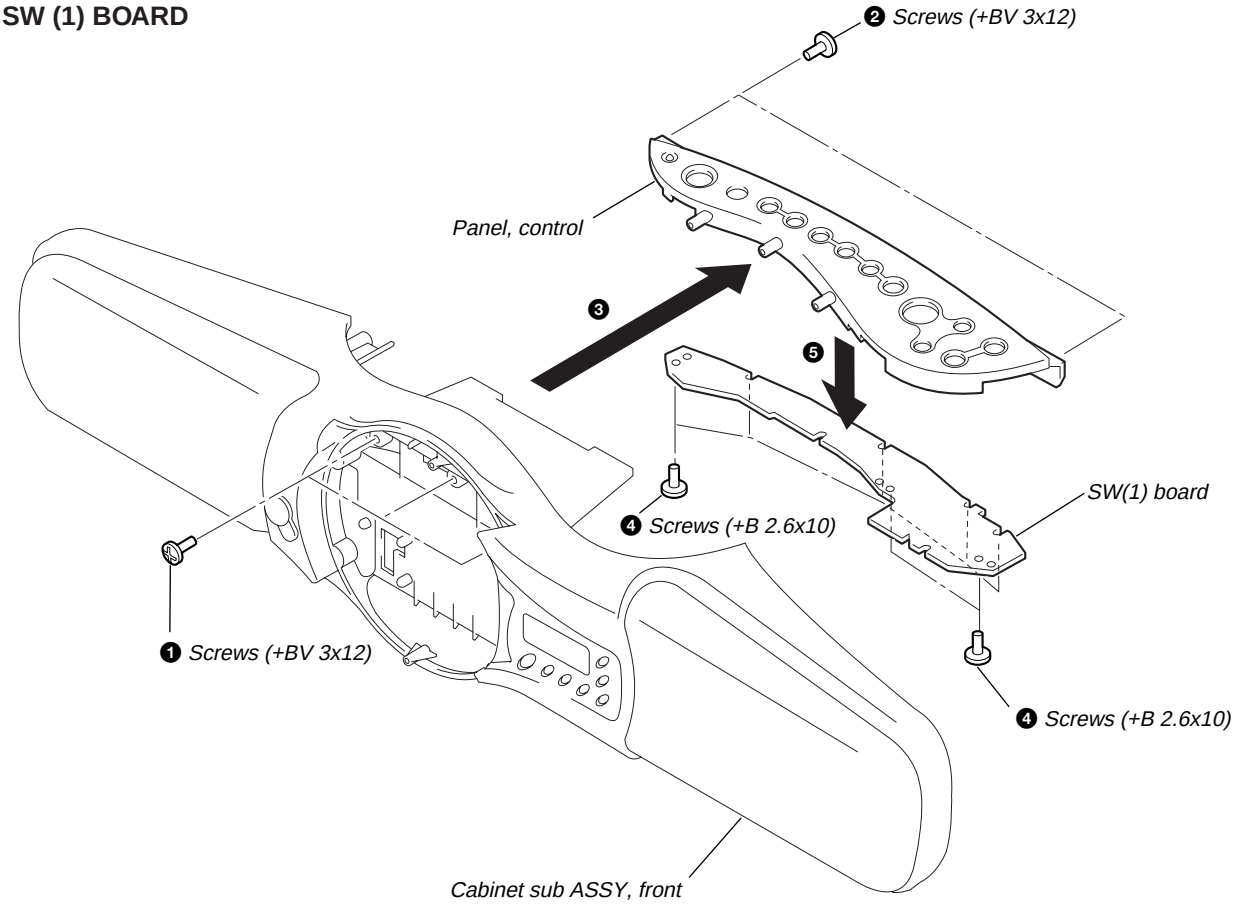
3-4. CONTROL BOARD, SW (2) BOARD



3-5. CD BLOCK ASSY

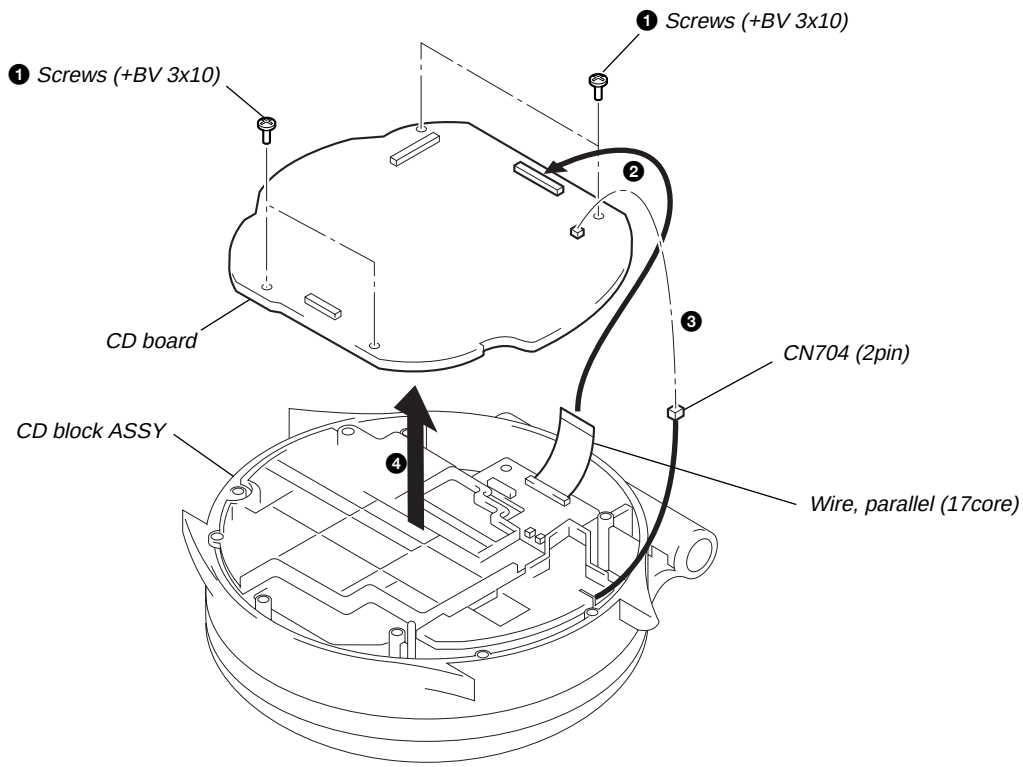


3-6. SW (1) BOARD

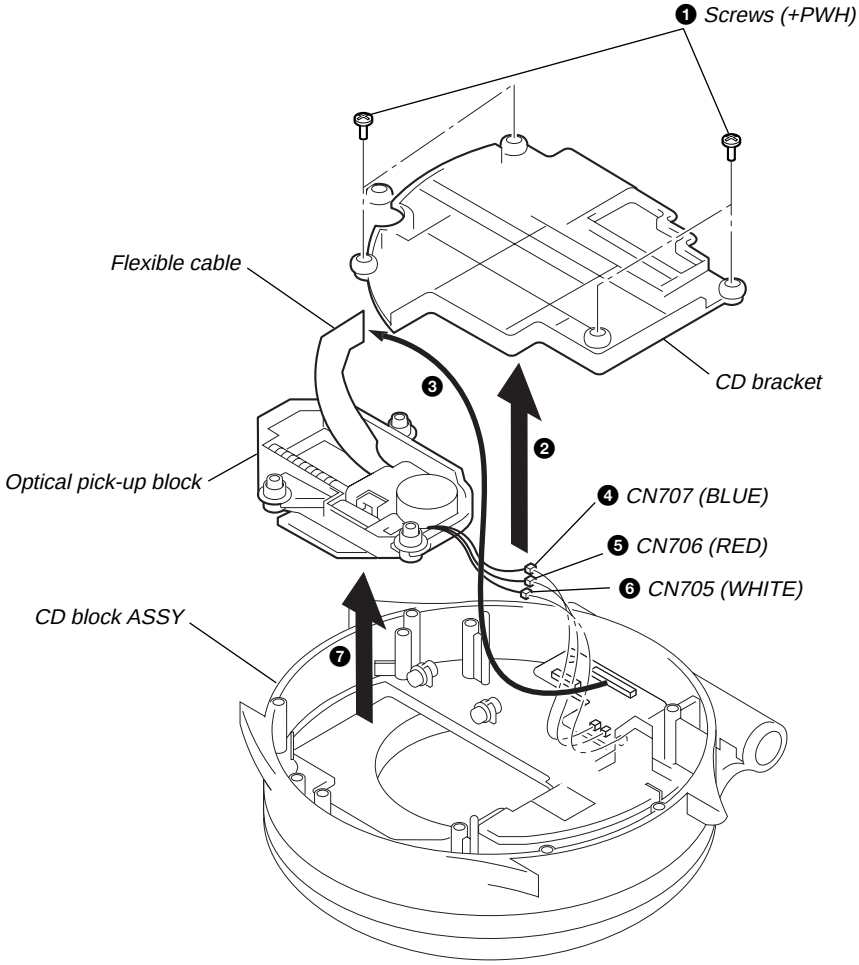


< CD BLOCK ASSY SECTION>

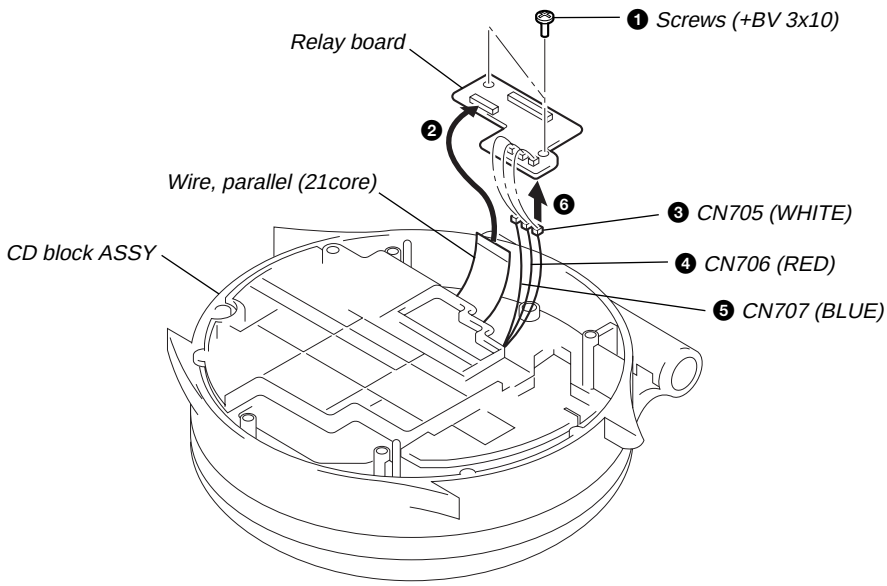
3-7. CD BOARD



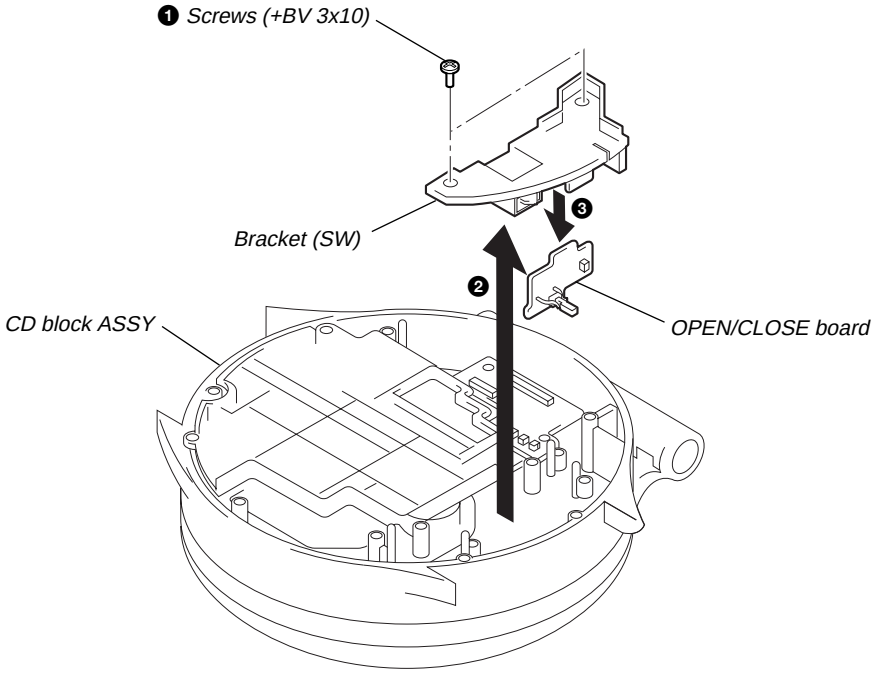
3-8. OPTICAL PICK-UP BLOCK



3-9. RELAY BOARD

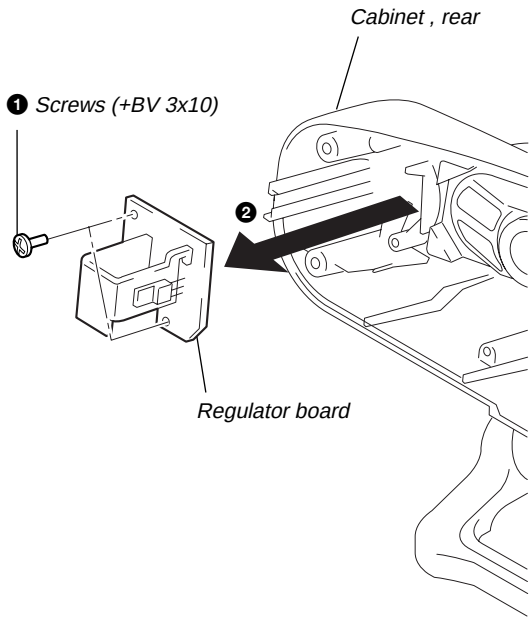


3-10. OPEN/CLOSE BOARD

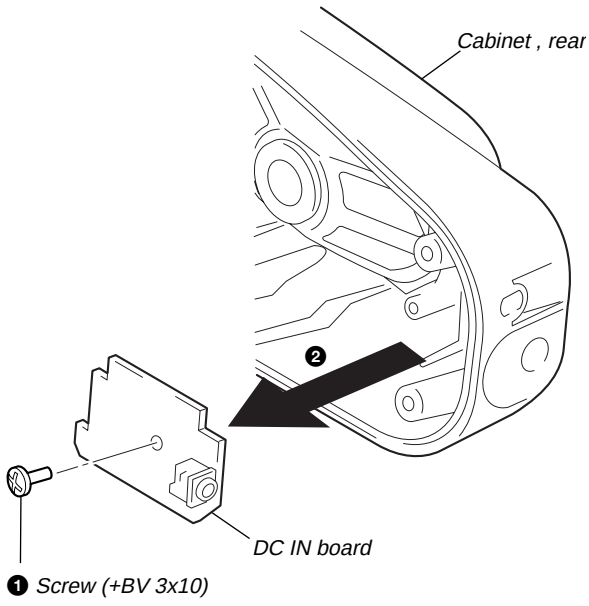


< "CABINET, REAR" SECTION>

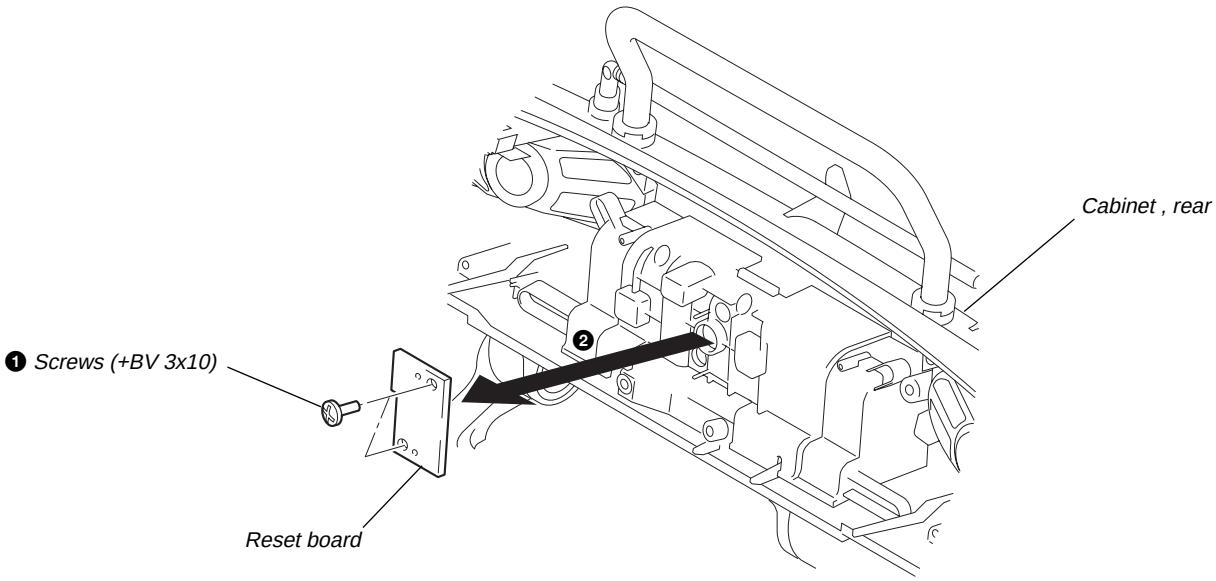
3-11. REGULATOR BOARD



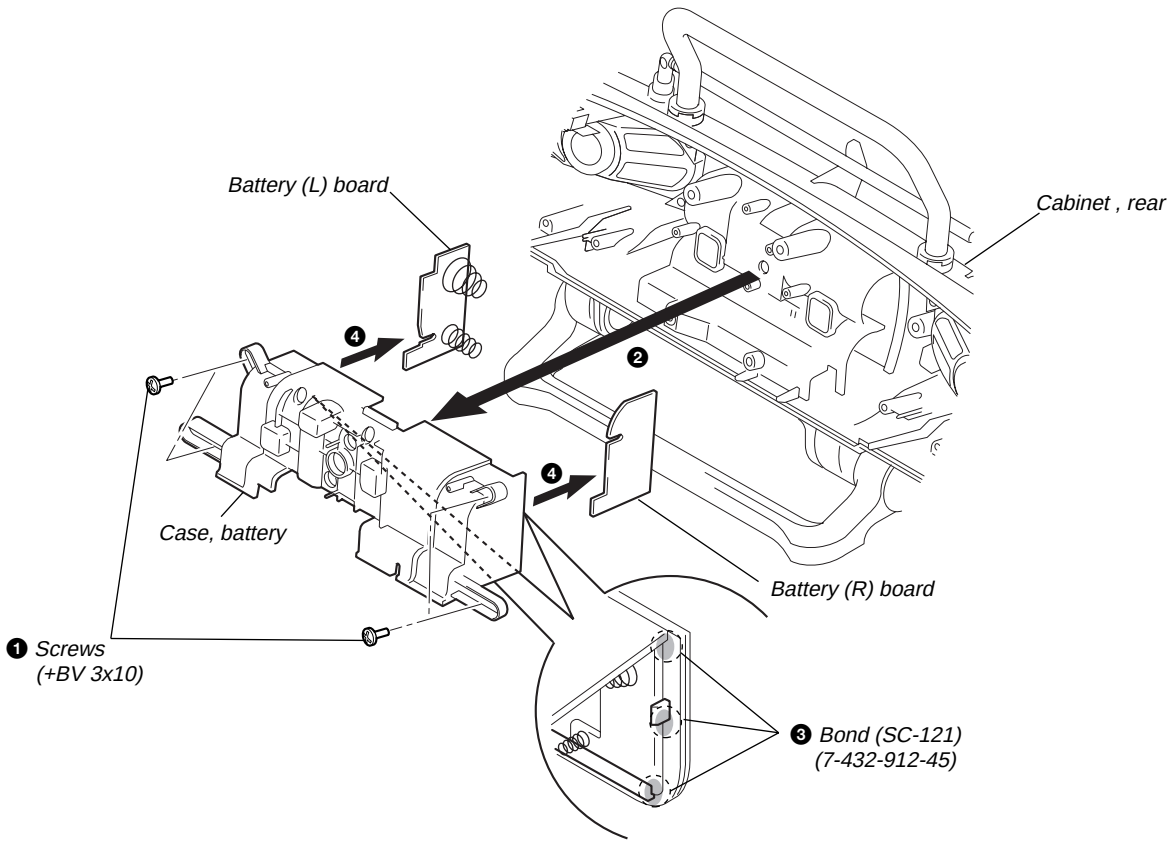
3-12. DC IN BOARD



3-13. RESET BOARD



3-14. BATTERY (L) BOARD, BATTERY (R) BOARD

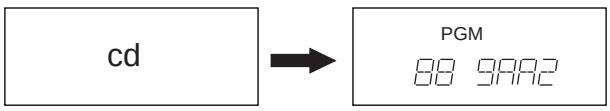


SECTION 4
TEST MODE

CD SECTION

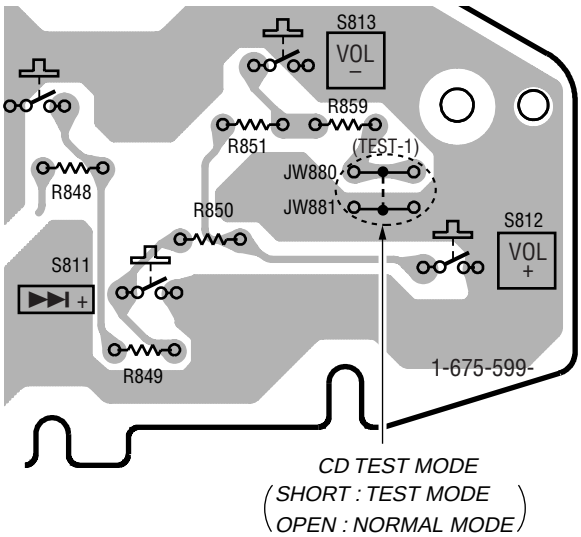
1. Entering CD test mode

With the POWER button ON, short JW880 and JW881 on the SW (1) board. (You need a moment for the short.)
The LCD display changes as in the diagram and the unit goes into test mode.



When you press the ▶II key, the CD rotates and when you press the ▶II key again, the CD plays (the track servo comes on)(but no sound is issued).
Pressing the ▶II key starts automatic adjustment and the value changes, but this value is not a problem.

[SW (1) BOARD] (Conductor side)



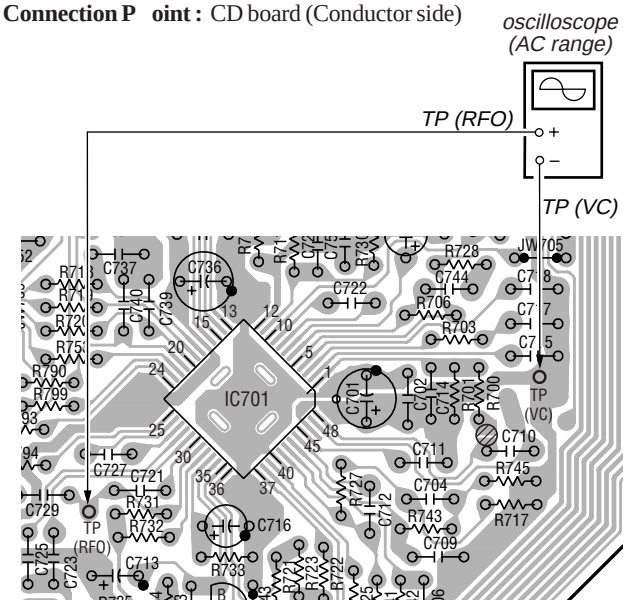
2. Exiting test mode

With the unit in test mode, when you press the POWER button to OFF, test mode ends.

3. RF LEVEL and jitter check

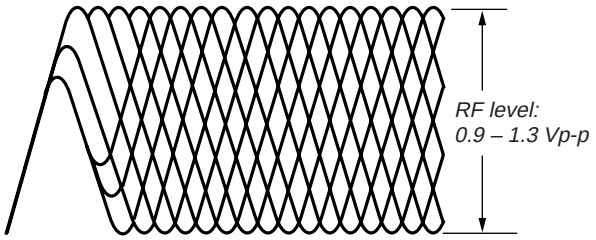
Test mode PLAY status

Connection P oint : CD board (Conductor side)



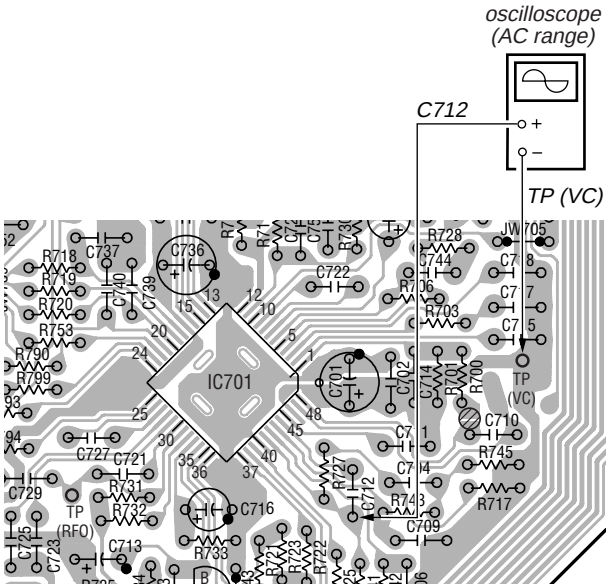
Check to see that the jitter is less than 9.0 nsec. and RF level is between 0.9 –1.3Vp-p.

VOLT/DIV : 200mV (using 10:1 probe)
TIME/DIV : 500ns



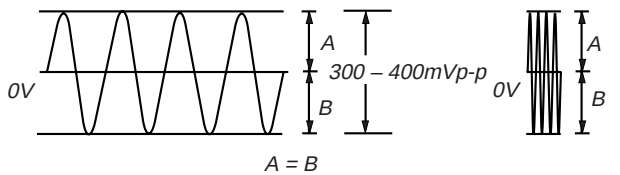
4. TRAVERSE SIGNAL check

Connection P oint : CD board (Conductor side)



Press the FF or FR from step 3.
Check to see that the traverse signal level is between 300 to 400mVp-p.

Note:
Extend the sweep time for easier view.



5. RELEASE THE TEST MODE

After completed with adjustment, press the POWER button to release the test mode.

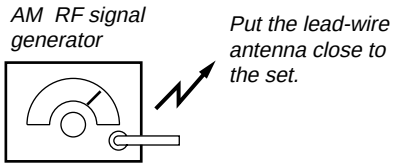
SECTION 5
ELECTRICAL ADJUSTMENTS

TUNER SECTION

0 dB = 1 µ V

AM Section

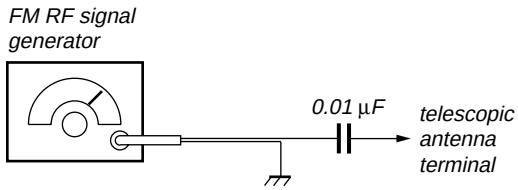
BAND button : AM
Volume : MIN



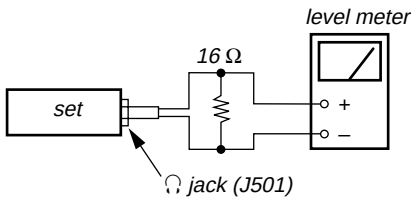
30% amplitude modulation by 400Hz signal.
Output level : as low as possible

FM Section

BAND button : FM
Volume : MIN



22.5kHz frequency deviation by 400Hz signal.
Output level : as low as possible



Adjustment Location : Tuner board (See page 14)

- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

AM IF ADJUSTMENT	
Adjust for a maximum reading on level meter.	
CFT1	450kHz

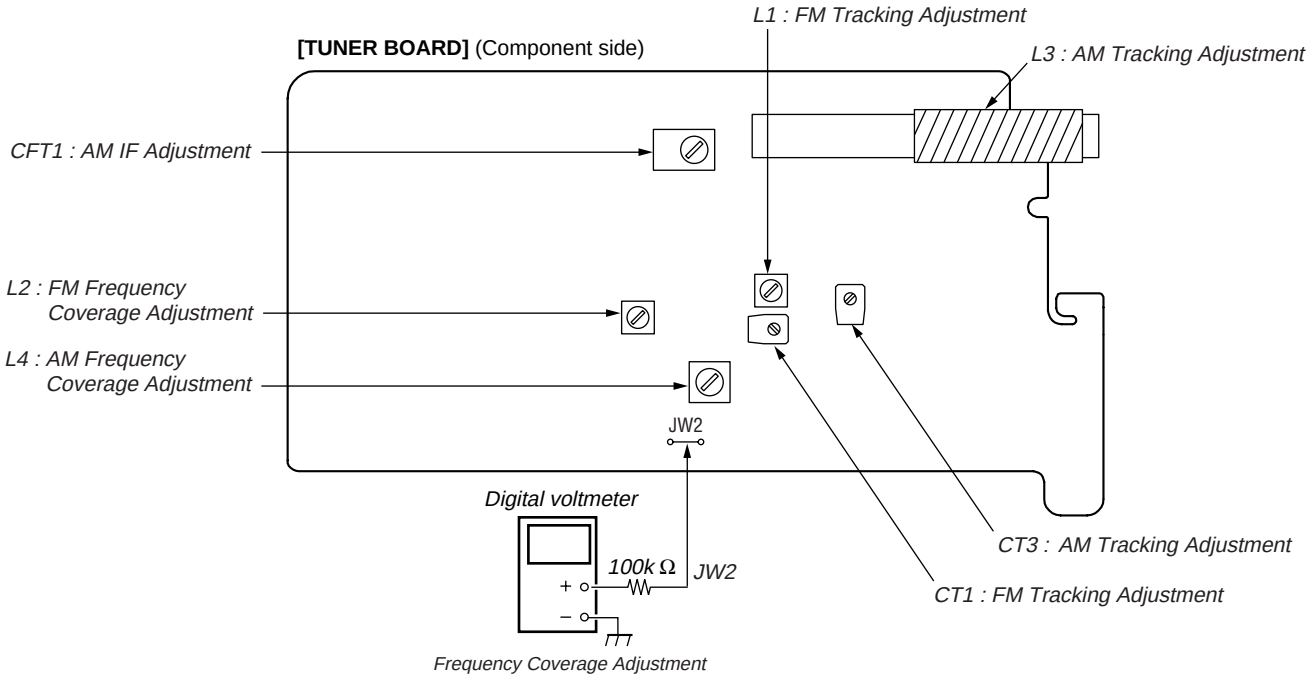
AM FREQUENCY COVERAGE ADJUSTMENT		
Adjust part	Frequency display	reading on digital voltmeter.
L4	530kHz	Adjustment Value : 0.9V Standard Value : 0.85 – 0.95V
Confirmation	1,710kHz	4.6 – 5.8V

AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L3	620kHz
CT3	1,400kHz

FM FREQUENCY COVERAGE ADJUSTMENT		
Adjust part	Frequency display	reading on digital voltmeter.
Confirmation	87.5MHz	1.55 – 1.85V
L2	108MHz	Adjustment Value : 4.0V Standard Value : 3.9 – 4.1V

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L1	87.5MHz
CT1	108MHz

Connect and Adjustment Location :



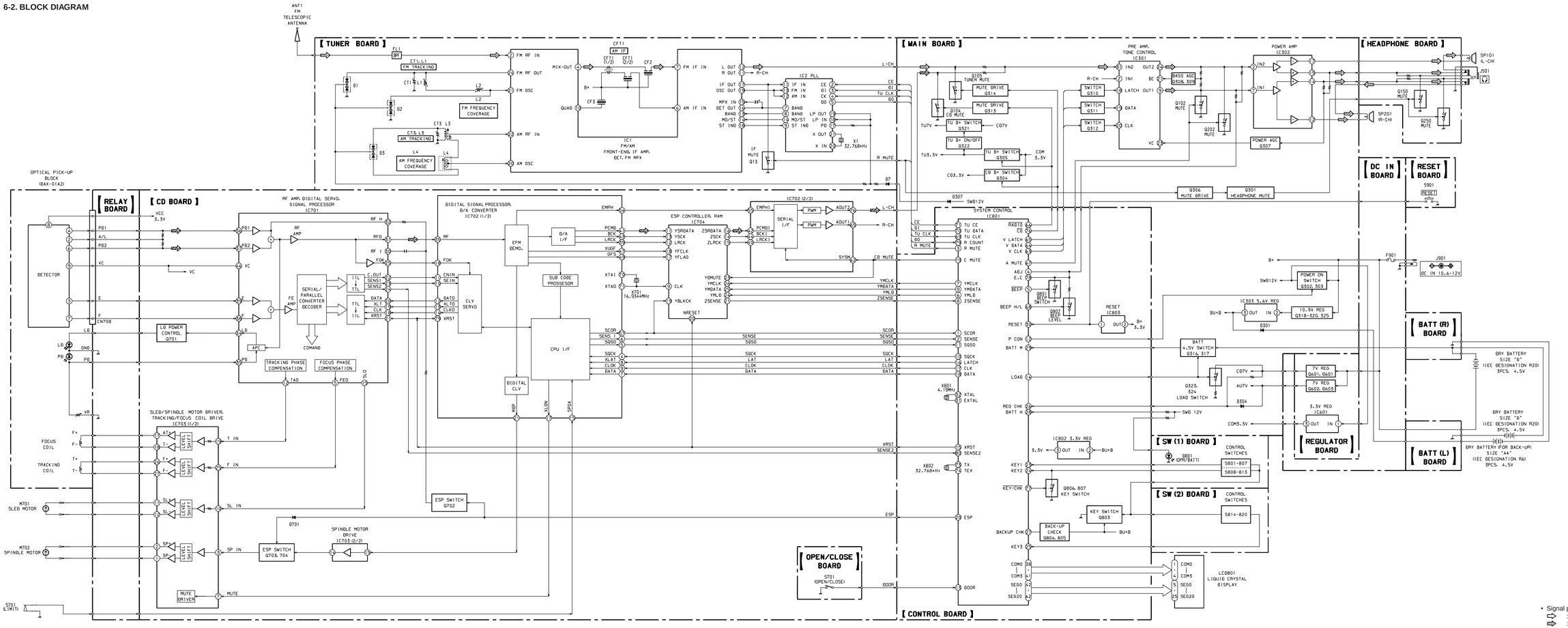
SECTION 6
DIAGRAMS

6-1. EXPLANATION OF IC TERMINALS

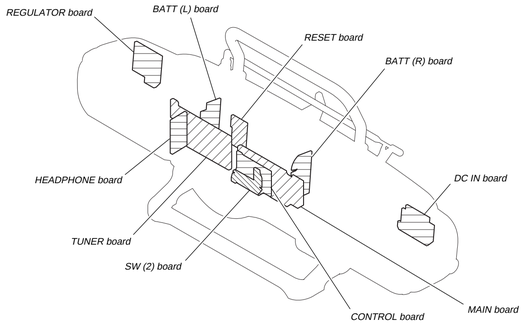
IC801 SYSTEM CONTROL (CXP83620-016Q)

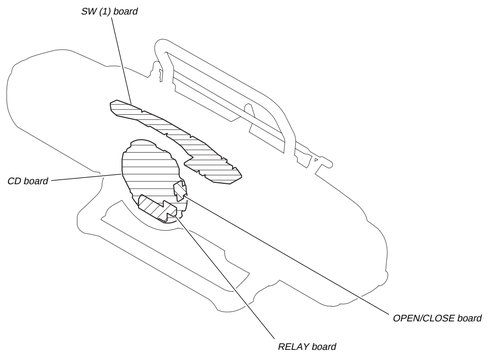
Pin No.	Pin name	I/O	Description
1	SCOR	I	CD SCOR input.
2	SENSE	I	CD SENS input..
3	R-MUTE	O	Radio muting signal output.
4	ADJ	O	DC 1.7V output for beep signal.
5	$\overline{\text{BEEP}}$	O	Beep signal output.
6	YMLD	O	LATCH signal output for ESP controller (IC704).
7	YMCLK	O	Serial clock output for ESP controller (IC704).
8	ZSENSE	I	Serial data input from ESP controller (IC704).
9	YMDATA	O	Serial data output for ESP controller (IC704).
10	SQCK	I	CD SQCK input.
11	SQSO	I	CD SUB Q data input.
12	P-CON	O	Power ON/OFF control signal output.
13	DOOR	I	CD door switch (S701) input.
14	LOAD	O	Battery check output.
15	XRST	O	System reset output.
16	LATCH	O	CD system LATCH output.
17	CLK	O	CD serial clock output.
18	DATA	O	CD serial data output.
19	C-MUTE	O	CD mute signal output.
20	ESP	O	ESP ON/OFF signal output.
21	INIT	–	Not used (OPEN).
22	SIMUKE	I	Destination detect input (Fixed at “H”).
23 – 25	KEY1-3	I	Key input.
26	REG-CHK	I	DC regrator output voltage detect input.
27	BACK UP-CHK	I	Back-up battery voltage detect input.
28	BATT-H	I	Main battery high voltage detect input.
29	BATT-M	I	Main battery low voltage detect input.
30	RESET	I	System reset input.
31	EXTAL	I	System clock oscillator input terminal (4.19MHz).
32	XTAL	O	System clock oscillator output terminal (4.19MHz).
33	VSS	–	Ground.
34	VL	I	Reference voltage input.
35 – 37	VLC1-3	I	Reference voltage input.
38 – 41	COMO 0-3	O	LCD common output.
42 – 62	SEG 0-20	O	LCD segment output.
63	V-CLK	O	Volume clock output.
64	DATA	O	Volume data output.
65	V-LATCH	O	Volume LATCH output.
66	RADIO	O	Function output for radio.
67	A-MUTE	O	Audio mute signal output.
68	BEEP-H/L	O	Beep level high/low select output.
69	TU-CLK	O	PLL IC clock output.
70	TU-DATA	O	PLL IC data output.

Pin No.	Pin name	I/O	Description
71	TU-CE	O	PLL IC chip enable output.
72	VDD	–	Power supply terminal (B+ 3.3V)
73	TX	O	Sub System clock oscillator output (32.768kHz).
74	TEX	I	Sub System clock oscillator input (32.768kHz).
75	NC	–	Not used (OPEN).
76	$\overline{CD}$	O	Function output for CD.
77	$\overline{KEY\text{-}CHK}$	O	Key operation enable output.
78	E. C	–	Connect to ADJ (4 pin).
79	R-COUNT	I	PLL IC data input.
80	SENS 2	I	CD SENS 2 input.


ANT1
FM TELESCOPIC ANTENNA
【 TUNER BOARD 】
FM TRACKING
FM FREQUENCY COVERAGE
AM TRACKING
AM FREQUENCY COVERAGE
IC1 FM/AM FRONT-END, IF AMP, DET, FM MPX
IC2 PLL
X1 32.768kHz
X2 7.2MHz
【 MAIN BOARD 】
PRE AMP, TONE CONTROL IC501
POWER AMP IC502
BASS AGC Q508, 509
TUNER MUTE Q514
CD MUTE Q104
MUTE DRIVE Q513
TU B+ SWITCH Q521
TU B+ ON/OFF Q522
TU B+ SWITCH Q505
CD B+ SWITCH Q504
COM 3.3V
SWITCH Q510
SWITCH Q511
SWITCH Q512
Q102 MUTE
Q202 MUTE
POWER AGC Q507
Q306 MUTE DRIVE
Q501 HEADPHONE MUTE
SWD12V
SYSTEM CONTROL IC801
【 HEADPHONE BOARD 】
SP101 4-CH0
J501 PHONES
Q150 MUTE
Q250 MUTE
SP201 R-CH0
【 DC IN BOARD 】
【 RESET BOARD 】
S901 RESET
F901
J901 DC IN 10.6-12V
POWER ON SWITCH Q502, 505
IC303 5.6V REG
10.9V REG Q518-520, 525
Q301
Q801 RESET SWITCH
Q802 BEEP LEVEL
RESET IC805
B+ 3.5V
BATT 4.5V SWITCH Q516, 517
Q525, 526 LOAD SWITCH
D304
7V REG Q601, Q401
7V REG Q402, Q403
3.3V REG IC401
【 REGULATOR BOARD 】
【 BATT (R) BOARD 】
【 BATT (L) BOARD 】
DRY BATTERY SIZE "B" (IEC DESIGNATION R20) 3PCS. 4.5V
DRY BATTERY FOR BACK-UP SIZE "AA" (IEC DESIGNATION R6) 3PCS. 4.5V
IC802 3.3V REG
【 SW (1) BOARD 】
D801 (DPR/BATT)
CONTROL SWITCHES S801-807, S808-813
【 SW (2) BOARD 】
CONTROL SWITCHES S814-820
Q804-807 KEY SWITCH
KEY SWITCH Q803
BACK-UP CHECK Q804, 805
LCD801 LIQUID CRYSTAL DISPLAY
X801 4.19MHz
X802 32.768kHz
【 CONTROL BOARD 】
【 OPEN/CLOSE BOARD 】
S701 (OPEN/CLOSE)
OPTICAL PICK-UP BLOCK (DAX-01A2)
【 RELAY BOARD 】
【 CD BOARD 】
DETECTOR
CN708
LD POWER CONTROL Q701
APC
RF AMP, DIGITAL SERVO, SIGNAL PROCESSOR IC701
SERIAL/ PARALLEL CONVERTER DECODER
COMAND
TRACKING PHASE COMPENSATION
FOCUS PHASE COMPENSATION
DIGITAL SIGNAL PROCESSOR, D/A CONVERTER IC702 (1/2)
EFM DEMOD.
D/A I/F
SUB CODE PROSSESOR
CPU I/F
CLV SERVO
DIGITAL CLV
ESP CONTROLLER, RAM IC704
X701 16.9344MHz
IC702 (2/2)
SERIAL I/F
SLED/SPINDLE MOTOR DRIVER, TRACKING/FOCUS COIL DRIVE IC703 (1/2)
LEVEL SHIFT
FOCUS COIL
TRACKING COIL
M701 SLED MOTOR
M702 SPINDLE MOTOR
S701 (LIMIT)
MUTE DRIVER
SPINDLE MOTOR DRIVE IC703 (2/2)
ESP SWITCH Q702
ESP SWITCH Q703, 704
Q701
R-CH IS OMITTED:SAME AS L-CH
• Signal path.
: FM
: CD

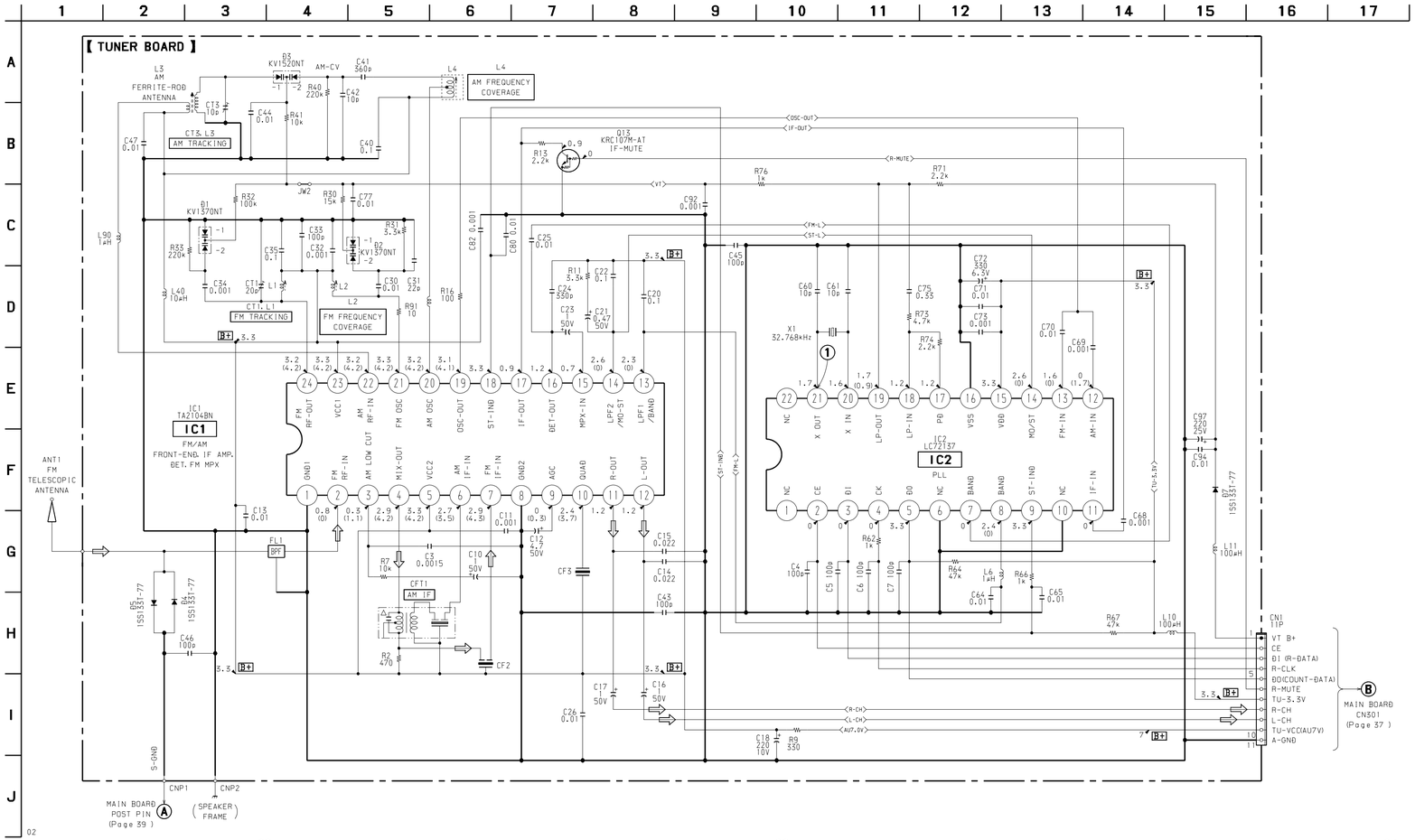
● Circuit Boards Location



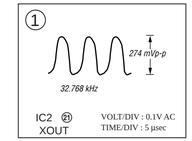


6-3. SCHEMATIC DIAGRAM (TUNER SECTION)

● Refer to page 45 for IC Block Diagram.



● Waveform

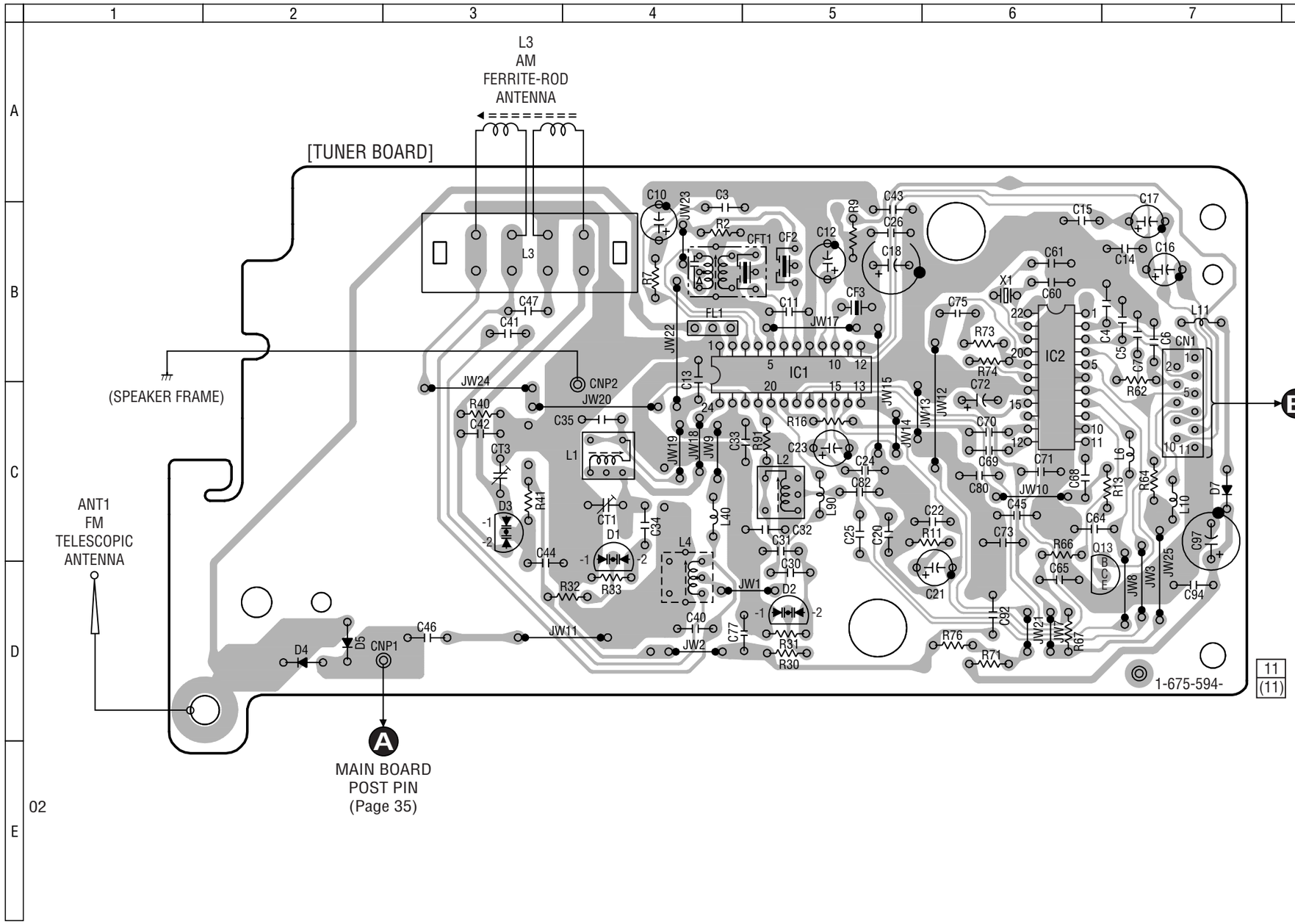


Note:

- All capacitors are in μF unless otherwise noted. pF: μμF
  50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- △ : internal component.
- B+ : B+ Line.
- ▭ : adjustment for repair.
- Power voltage is dc 12 V and fed with regulated dc power supply from external power voltage jack (J901).
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : AM
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM

6-4. PRINTED WIRING BOARDS (TUNER SECTION)

● Refer to page 21 for Circuit Boards Location.



● **Semiconductor Location**

Ref. No.	Location
D1	C-4
D2	D-5
D3	C-3
D4	D-2
D5	D-2
D7	C-7
IC1	B-5
IC2	B-6
Q13	D-7

Note:

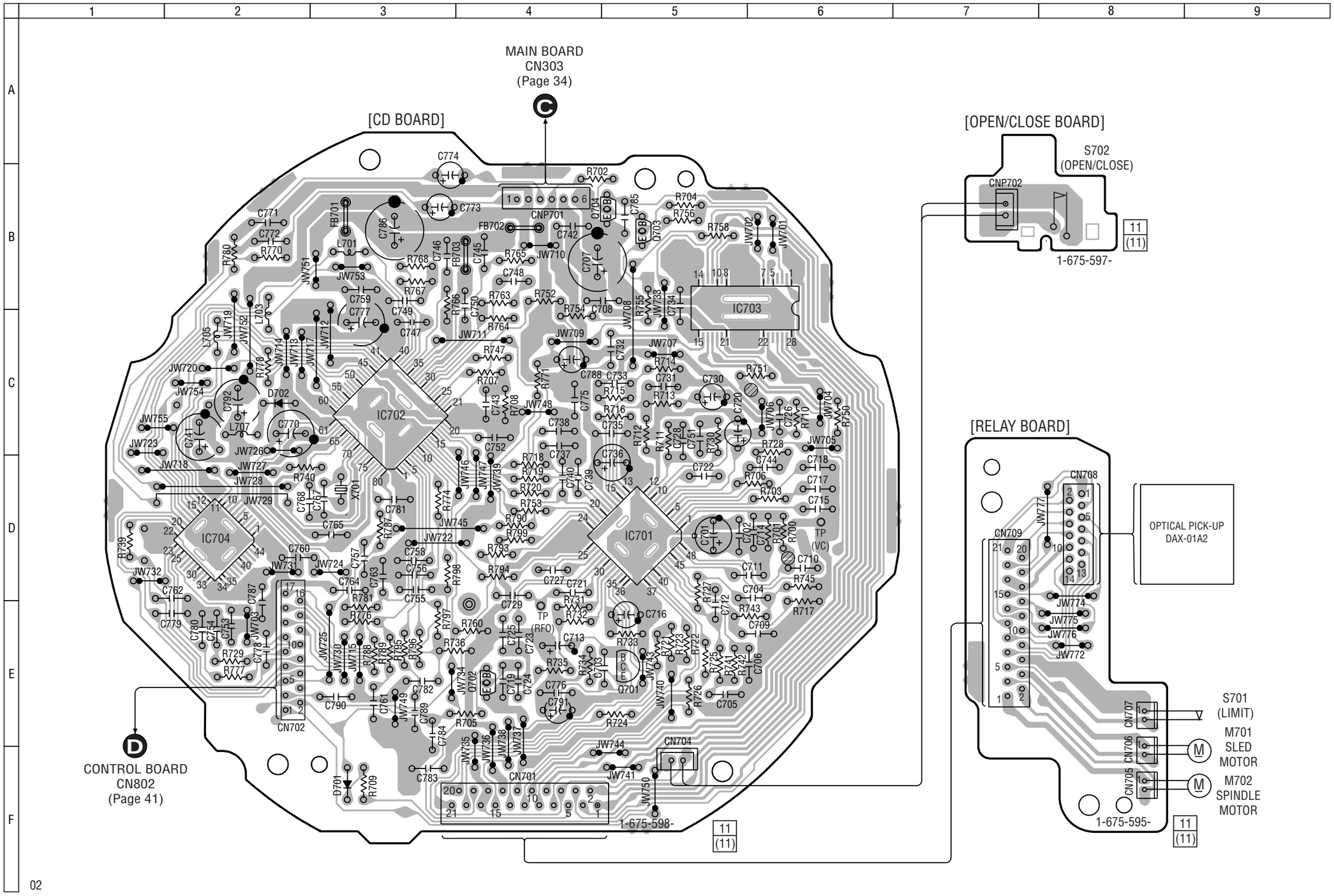
- ○——— : parts extracted from the component side.
- △ : internal component.
- ▒▒▒ : Pattern from the side which enables seeing.

6-5. PRINTED WIRING BOARDS (CD SECTION)

● Refer to page 21 for Circuit Boards Location.

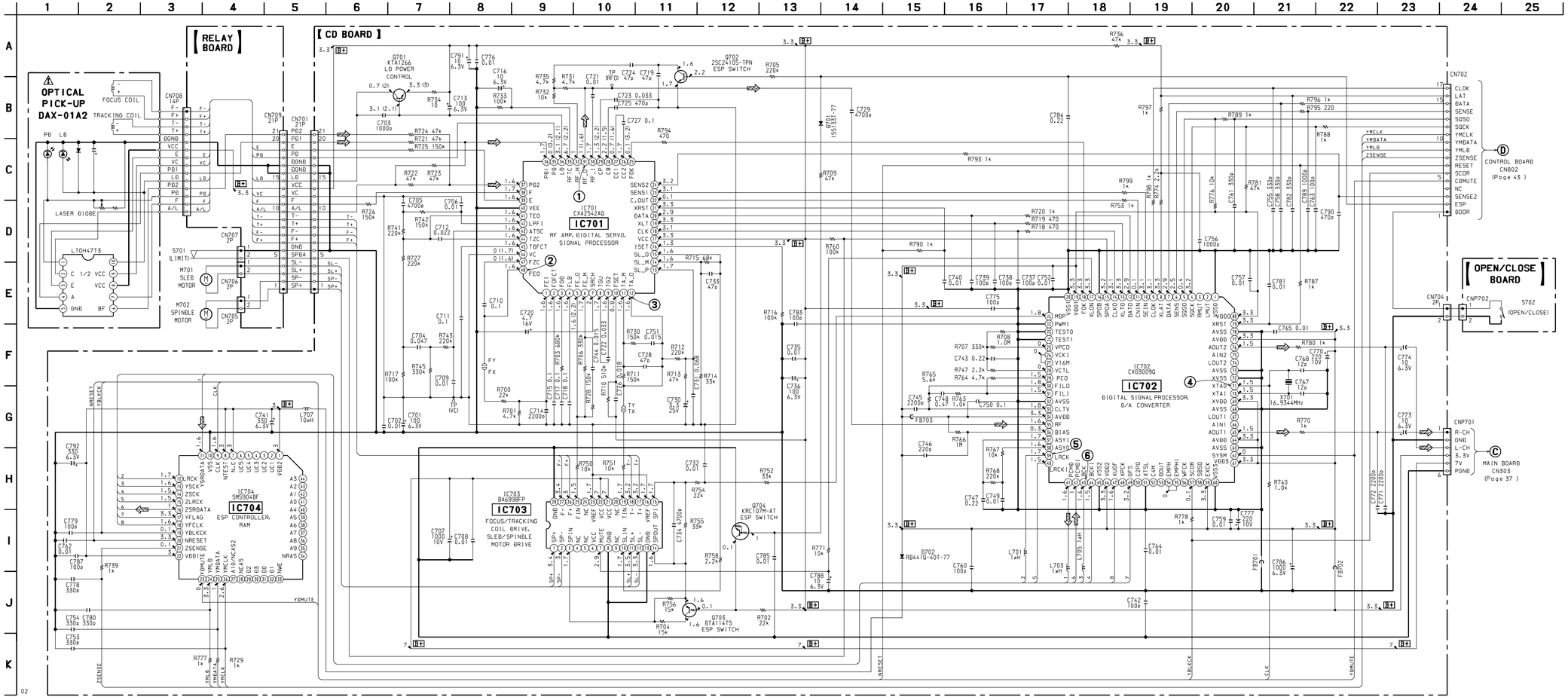
● **Semiconductor Location**

Ref. No.	Location
D701	F-3
D702	C-2
IC701	D-5
IC702	C-3
IC703	B-5
IC704	D-2
Q701	E-5
Q702	E-4
Q703	B-5
Q704	B-5



Note:

- ○——— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.


【 RELAY BOARD 】
【 CD BOARD 】
OPTICAL PICK-UP DAX-01A2
IC701 CXA2542AQ RF AMP, DIGITAL SERVO, SIGNAL PROCESSOR
IC702 CXD5009Q DIGITAL SIGNAL PROCESSOR, D/A CONVERTER
IC703 BA6998FP FOCUS/TRACKING COIL DRIVE, SLED/SPINDLE MOTOR DRIVE
IC704 SM59041BF ESP CONTROLLER, RAM
CONTROL BOARD CN802 (Page 43)
OPEN/CLOSE BOARD
MAIN BOARD CN303 (Page 37)

● Waveforms

① PLAY MODE	0.9 – 1.3 Vp-p	④	720 mVp-p, 16.934 MHz
IC701 ㉛ RFO	VOLT/DIV : 0.5 V AC TIME/DIV : 1 µsec	IC702 ㉑ XTAO	VOLT/DIV : 0.2 V AC TIME/DIV : 20 nsec
② PLAY MODE	0.7 Vp-p	⑤	6.6 Vp-p, 44.1 kHz
IC701 ㊽ FEO	VOLT/DIV : 0.2 V AC TIME/DIV : 0.5 msec	IC702 ㊴ LRCK	VOLT/DIV : 2 V AC TIME/DIV : 20 msec
③	0.6 Vp-p	⑥	3.2 Vp-p, 2.1 MHz
IC701 ⑫ TAO	VOLT/DIV : 0.2 V AC TIME/DIV : 1 msec	IC702 ㊸ BCK	VOLT/DIV : 1 V AC TIME/DIV : 0.2 µsec

Note:
- All capacitors are in µF unless otherwise noted. pF: µµF
  50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.

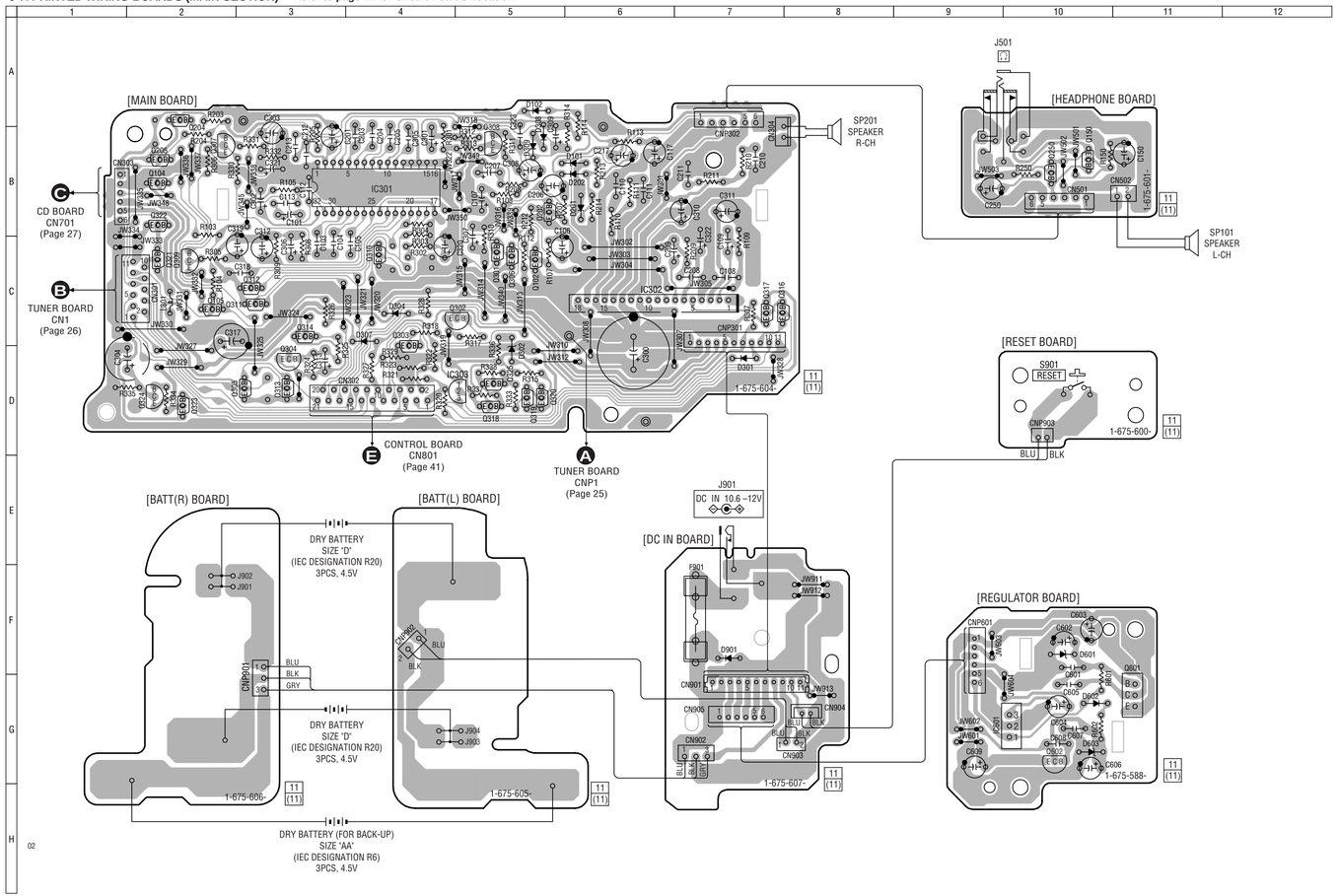
Note:	Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- B+ : B+ Line.
- Power voltage is dc 12 V and fed with regulated dc power supply from external power voltage jack (J901).
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : CD STOP
  ( ) : CD PLAY
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : CD

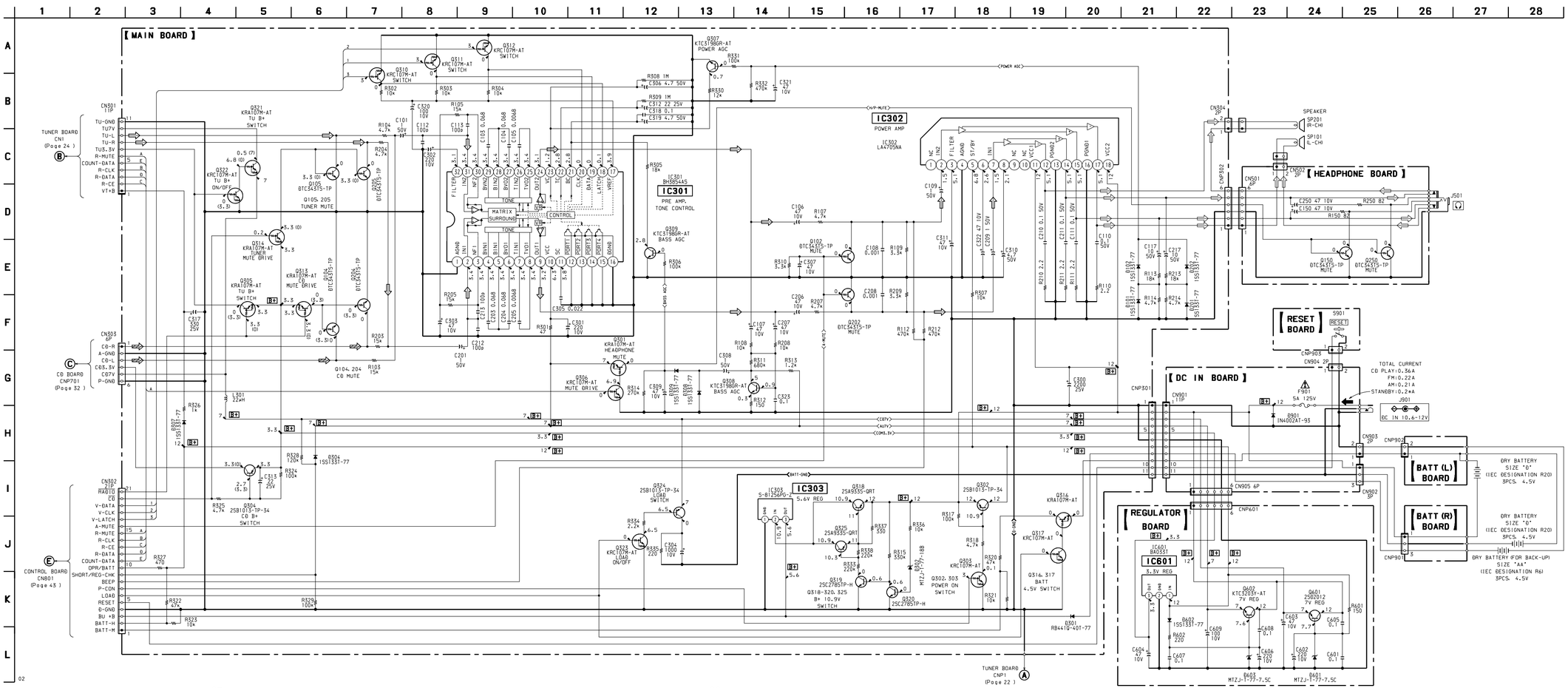
6-7. PRINTED WIRING BOARDS (MAIN SECTION) ● Refer to page 21 for Circuit Boards Location.

● **Semiconductor Location**

Ref. No.	Location
D101	B-6
D102	A-5
D201	B-6
D202	B-6
D301	D-7
D302	D-5
D304	C-4
D307	C-4
D308	B-5
D309	B-5
D601	F-10
D602	F-10
D603	G-10
D901	F-7
IC301	B-4
IC302	C-6
IC303	D-5
IC601	G-10
Q102	C-5
Q104	B-2
Q105	C-2
Q150	B-10
Q202	B-5
Q204	A-2
Q205	B-2
Q250	B-10
Q301	C-5
Q302	C-5
Q303	C-4
Q304	D-3
Q305	D-3
Q306	C-5
Q307	B-2
Q308	B-5
Q309	C-2
Q310	C-4
Q311	C-3
Q312	C-3
Q313	D-3
Q314	C-3
Q316	C-7
Q317	C-7
Q318	D-5
Q319	D-5
Q320	D-5
Q321	C-2
Q322	B-2
Q323	D-2
Q324	D-2
Q325	D-2
Q601	F-10
Q602	G-10



Note:
- ○——○ : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.



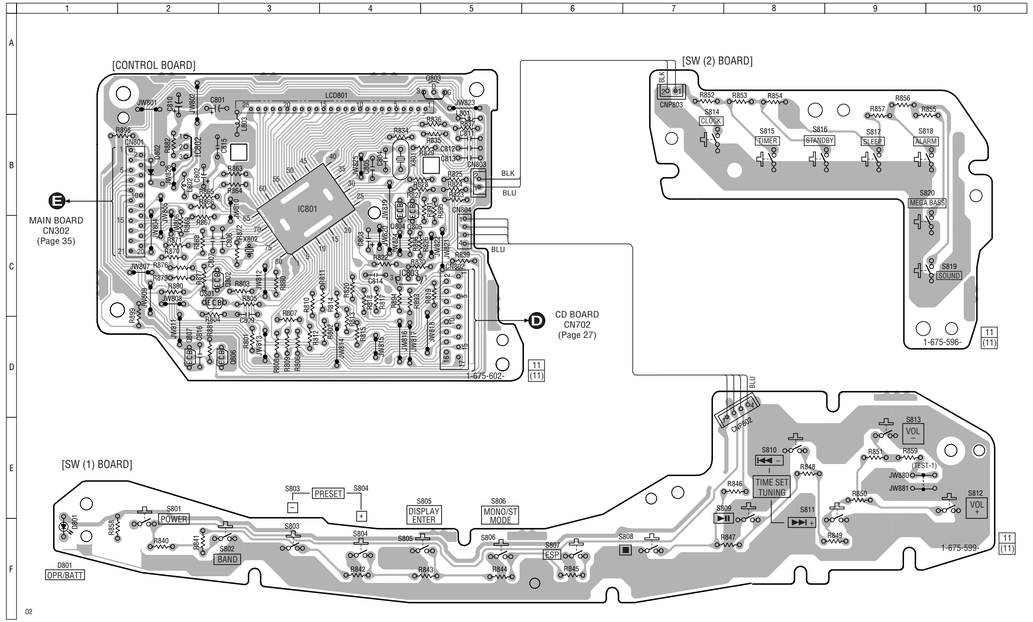
Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.

Note:	Note:
The components identified by mark ⚠or dotted line with mark ⚠are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- B+ : B+ Line.
- Power voltage is dc 12 V and fed with regulated dc power supply from external power voltage jack (J901).
- Voltages are dc with respect to ground under no-signal (detuned) conditions.
  no mark : CD
  ( ) : FM
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
  ⇨ : CD

6-9. PRINTED WIRING BOARDS (CONTROL SECTION) ● Refer to page 21 for Circuit Boards Location.



● **Semiconductor Location**

Ref. No.	Location
D801	F-1
D802	B-2
IC801	C-3
IC802	B-2
IC803	C-4
Q801	D-2
Q802	C-2
Q803	A-5
Q804	C-4
Q805	C-4
Q806	D-3
Q807	D-2

Note:
- ⟵ : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.

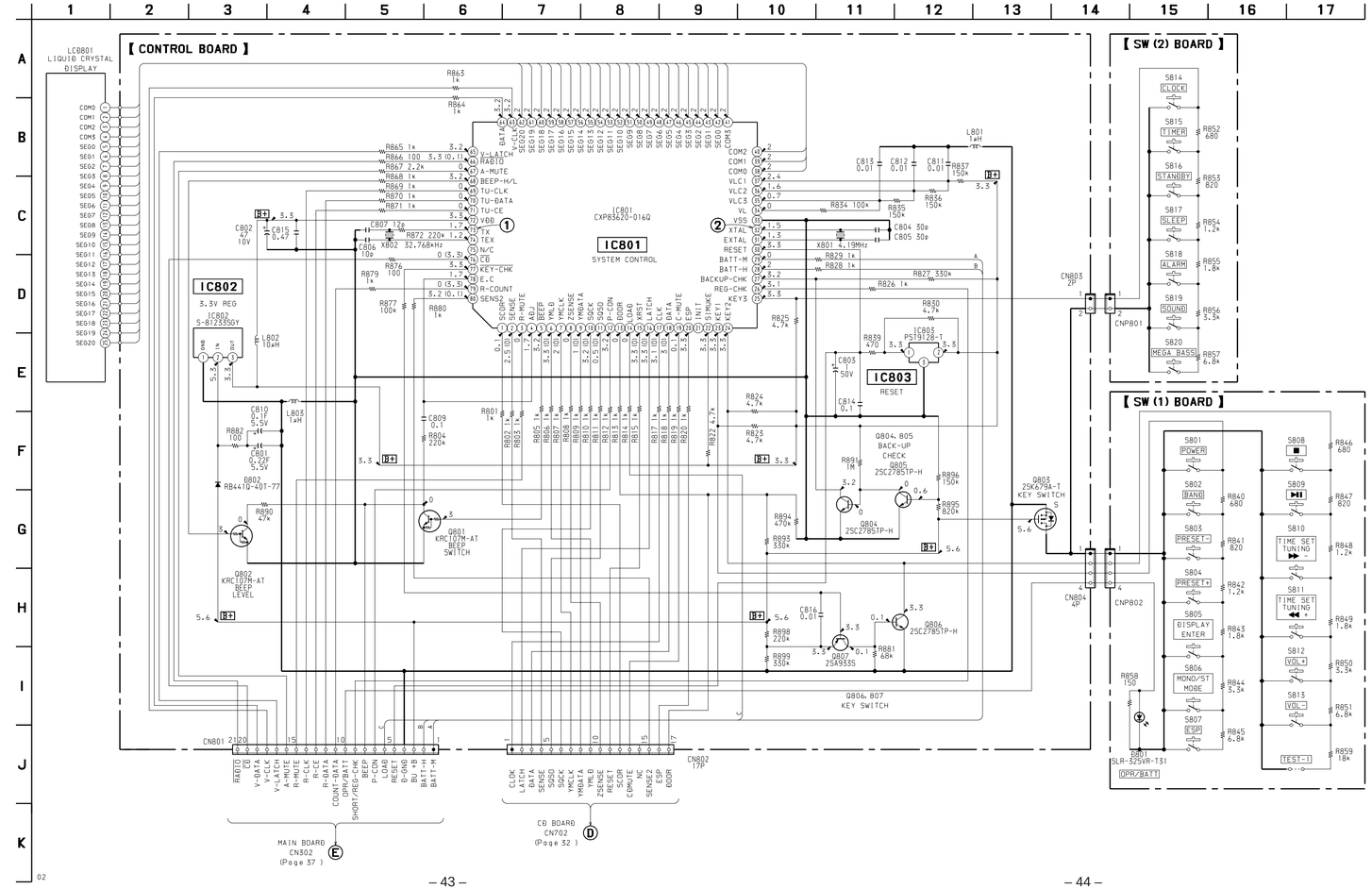
● **Waveforms**

① IC801 (73) TX — 271 mVp-p, 32.768 kHz — VOLT/DIV : 50mVAC, TIME/DIV : 5 µs sec

② IC801 (32) XTAL — 2.7 Vp-p, 4.19 MHz — VOLT/DIV : 0.5 V AC, TIME/DIV : 0.1µ sec

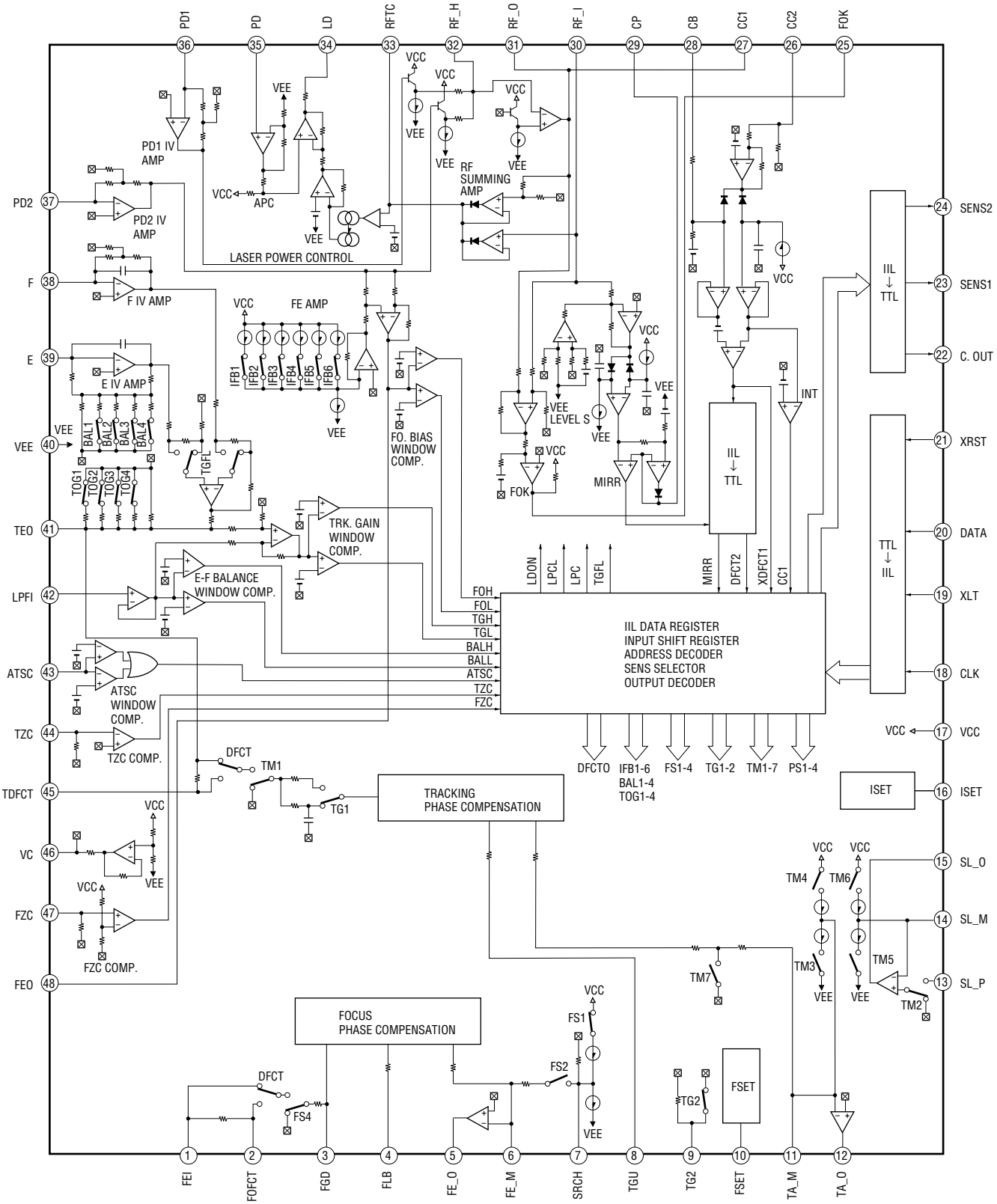
Note:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- B+ : B+ Line.
- Power voltage is dc 12 V and fed with regulated dc power supply from external power voltage jack (J901).
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : CD
  ( ) : FM
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.

6-10. SCHEMATIC DIAGRAM (CONTROL SECTION)

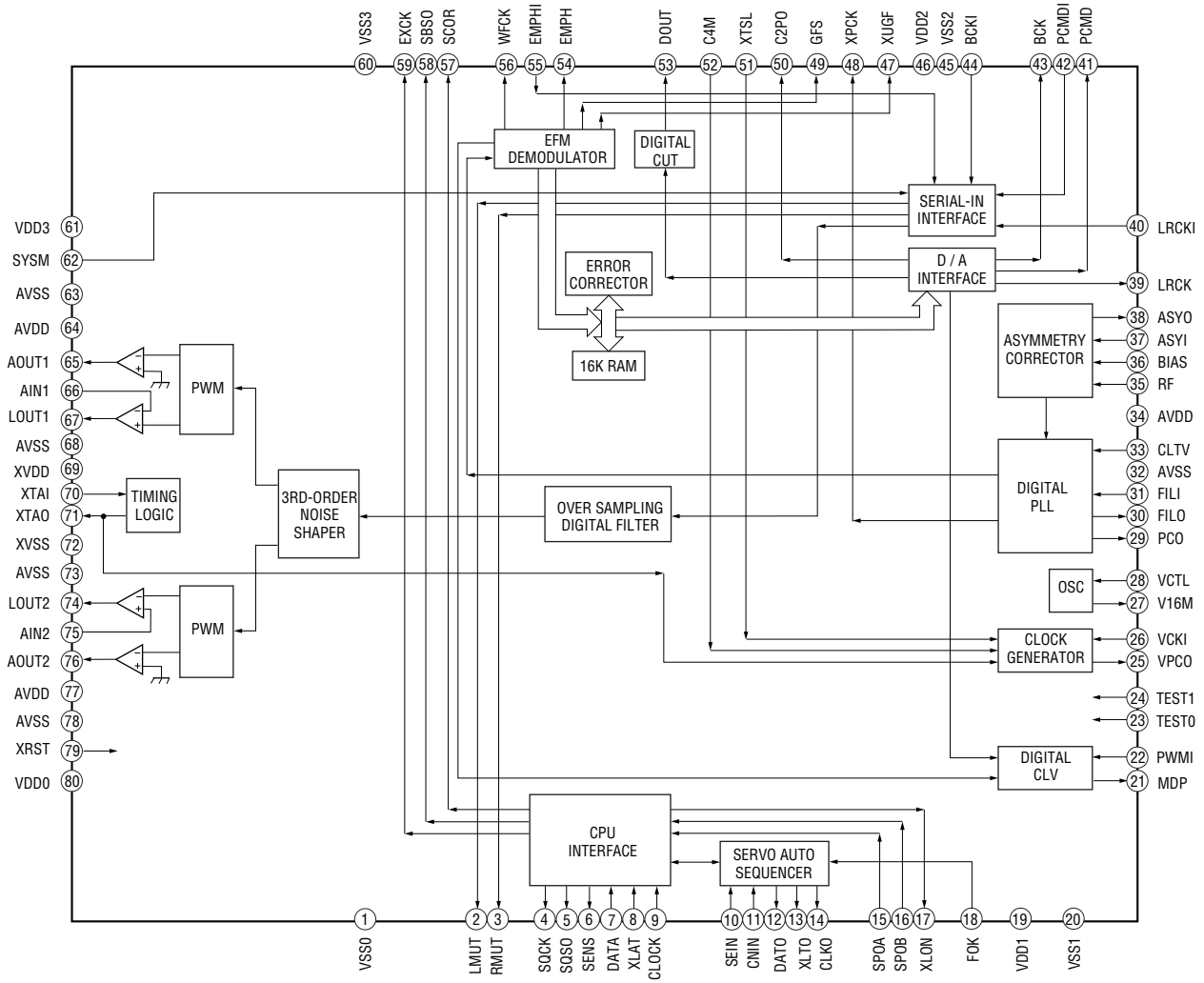

【 CONTROL BOARD 】
【 SW (2) BOARD 】
【 SW (1) BOARD 】
LCD801 LIQUID CRYSTAL DISPLAY
IC801 SYSTEM CONTROL
IC802 3.3V REG
IC803 RESET
Q806, 807 KEY SWITCH
MAIN BOARD CN302 (Page 37)
CD BOARD CN702 (Page 32)

● **IC Block Diagrams (CD Section)**

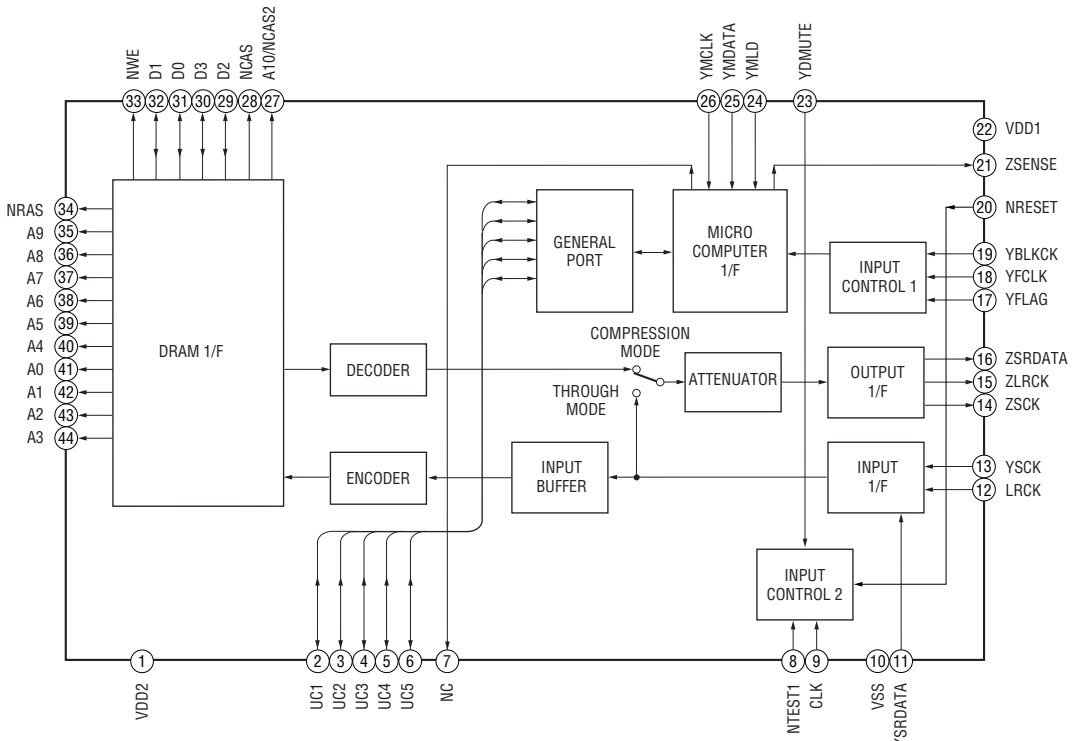
IC701 CXA2542AQ



IC702 CXD3009Q

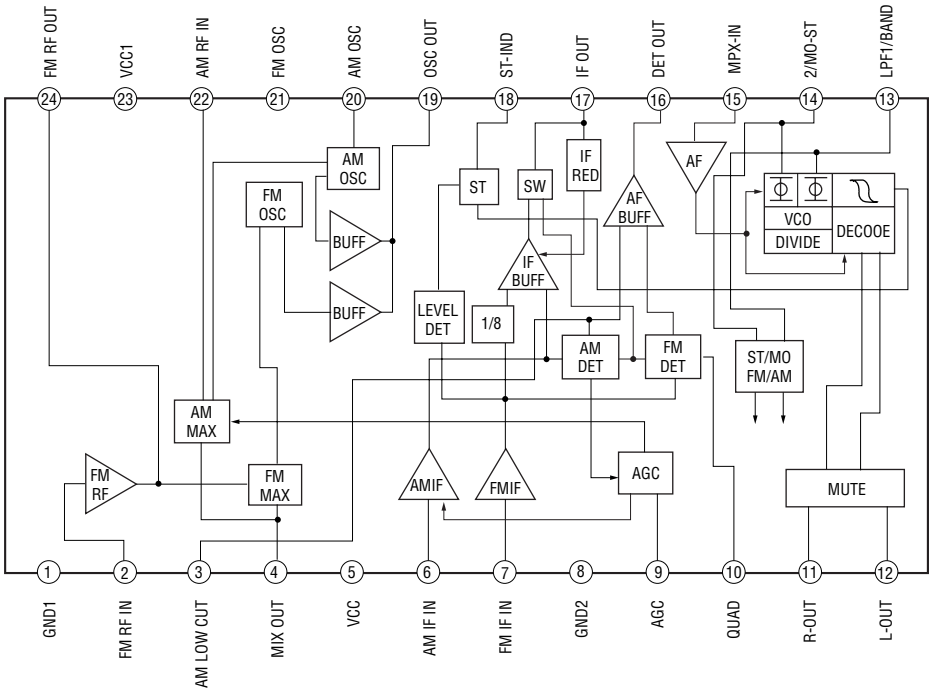


IC704 SM5904BF

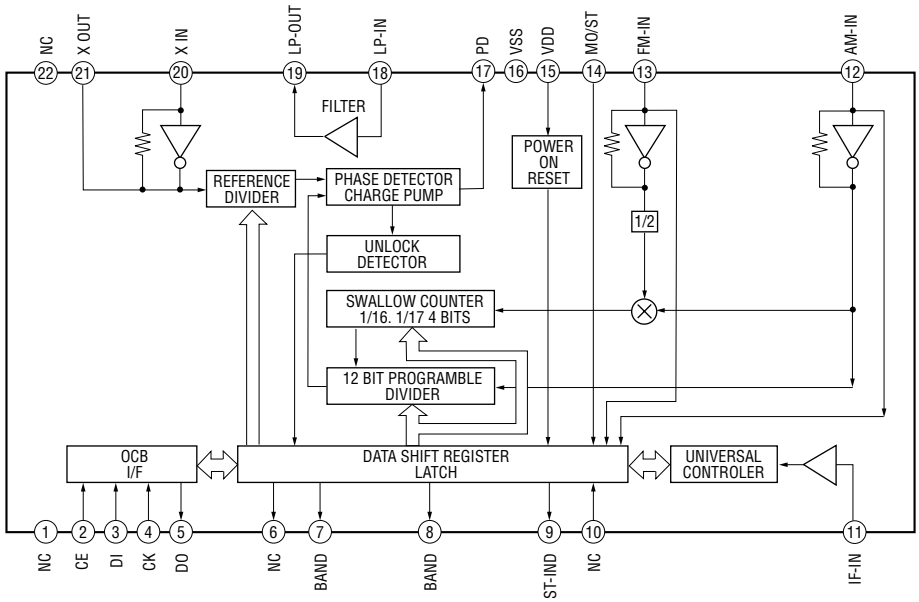


● IC Block Diagrams (Tuner Section)

IC1 TA2104BN



IC2 LC72137-D



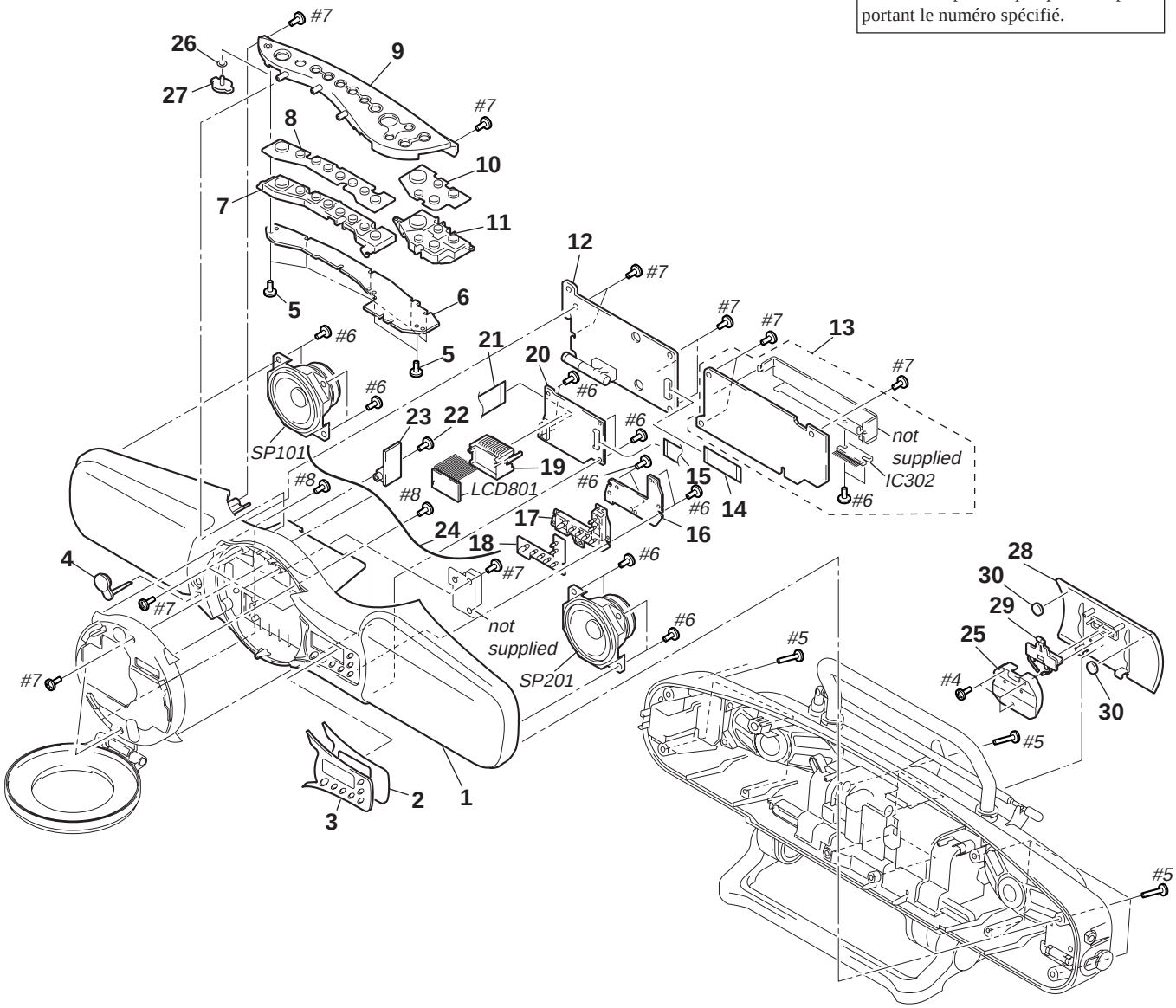
SECTION 7
EXPLODED VIEWS

NOTE :
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
  CND : Canadian

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

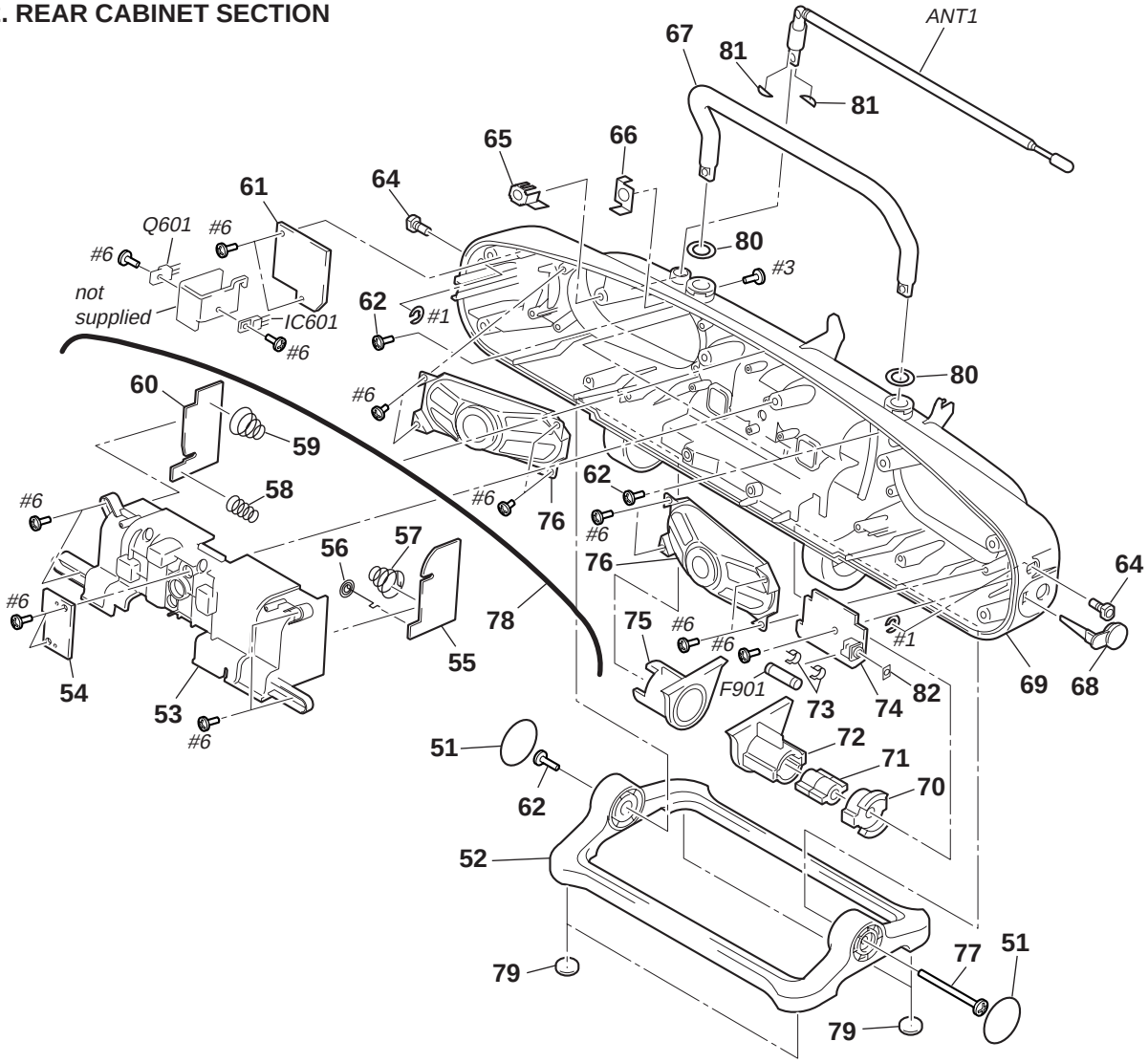
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

7-1. FRONT CABINET SECTION



Ref. No.	Part No.	Description	Remark
1	X-3378-024-1	CABINET SUB ASSY, FRONT	
2	3-040-393-01	SHEET(LCD), ADHESIVE	
3	3-040-392-01	WINDOW, LCD	
4	3-028-872-11	PACKING (JACK)	
5	4-931-757-41	SCREW(DIA.2.6X10) (IT3B)	
* 6	A-3322-289-A	SW (1) BOARD, COMPLETE	
7	3-040-382-01	BUTTON (POWER)	
8	3-040-383-01	RUBBER (POWER)	
9	3-040-384-01	PANEL, CONTROL	
10	3-040-381-01	RUBBER (VOL)	
11	3-040-380-01	BUTTON (VOL)	
* 12	A-3322-284-A	TUNER BOARD, COMPLETE	
* 13	A-3322-285-A	MAIN BOARD, COMPLETE	
14	1-791-611-11	WIRE, PARALLEL (FFC) (11 CORE)	
15	1-791-612-11	WIRE, PARALLEL (FFC) (21 CORE)	
* 16	1-675-596-11	SW (2) BOARD	
17	3-040-388-01	BUTTON (SOUND)	
18	3-040-387-01	RUBBER (SOUND)	
19	3-040-511-01	HOLDER, LCD	
* 20	A-3322-282-A	CONTROL BOARD, COMPLETE	
21	1-791-613-11	WIRE, PARALLEL (FFC) (17 CORE)	
22	3-911-135-01	SCREW (2.6X10), (+PWH) TAPPING	
* 23	1-675-601-11	HEADPHONE BOARD	
24	3-017-930-01	PACKING (F/R)	
25	3-040-346-01	BRACKET (S), BATTERY	
26	3-040-386-01	SHEET (POWER), ADHESIVE	
27	3-040-385-01	INDICATOR (POWER)	
28	3-040-344-01	LID,BATTERY CASE	
29	3-040-345-01	LOCK(BATT)	
30	3-042-819-01	CUSHION (2), SPEAKER	
IC302	8-759-333-16	IC LA4705NA	
LCD801	1-803-794-11	DISPLAY PANEL, LIQUID CRYSTAL	
SP101	1-529-504-11	SPEAKER (8cm) (L-CH)	
SP201	1-529-504-11	SPEAKER (8cm) (R-CH)	

7-2. REAR CABINET SECTION

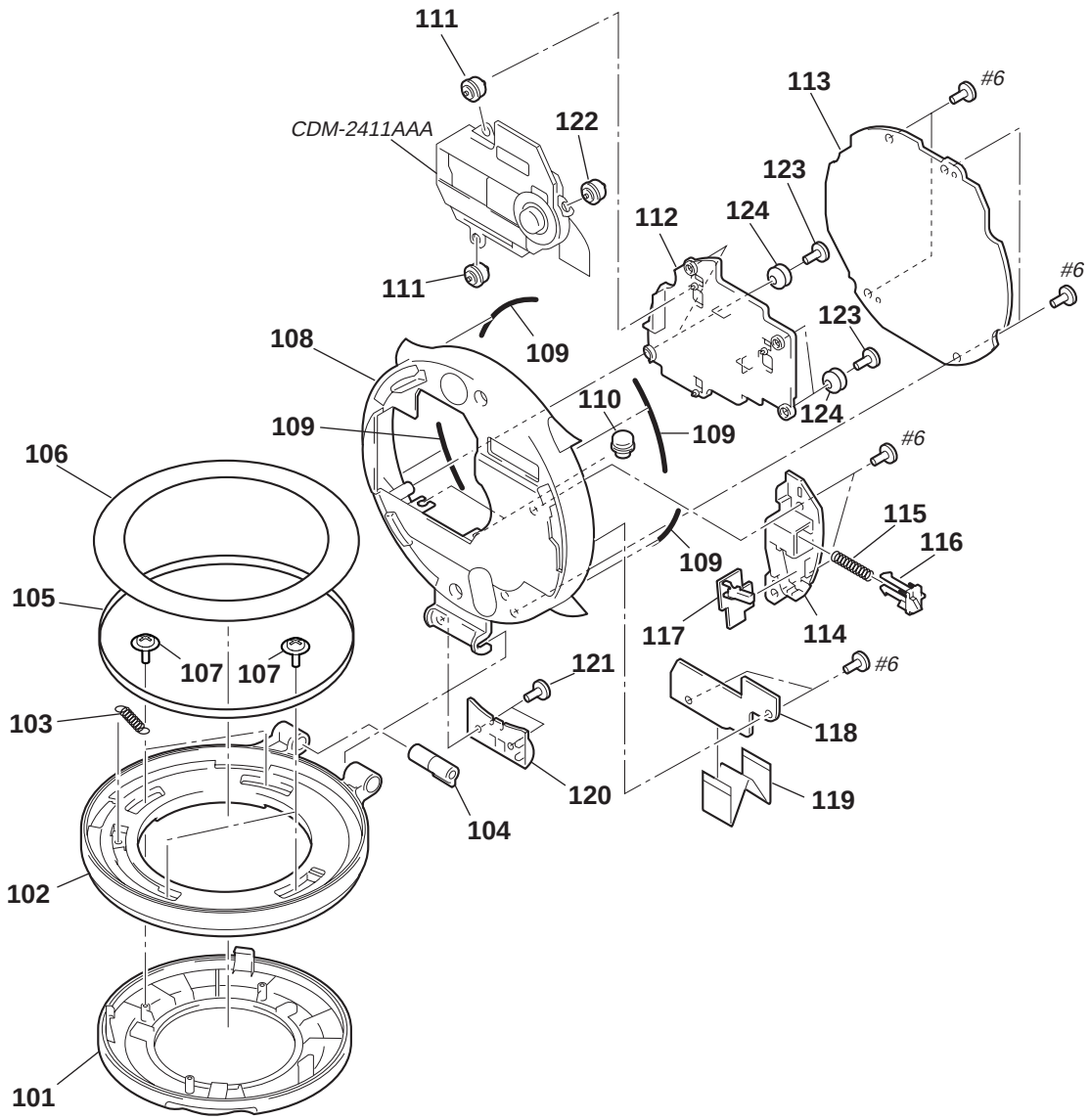


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
51	3-040-363-01	COVER, FOOT	
52	3-040-359-01	FOOT(TURN)	
53	3-040-367-01	CASE, BATTERY	
* 54	1-675-600-11	RESET BOARD	
* 55	1-675-606-11	BATT (R) BOARD	
56	3-040-369-01	SPRING (+) (S), BATTERY	
57	3-040-342-01	SPRING (-) (L), BATTERY	
58	3-040-343-01	SPRING (-) (S), BATTERY	
59	3-040-342-01	SPRING (-) (L), BATTERY	
* 60	1-675-605-11	BATT (L) BOARD	
* 61	1-675-588-11	REGULATOR BOARD	
62	3-040-358-01	SCREW (+BVWP11 3X14)	
64	3-040-364-01	NUT(BELT)	
65	3-040-356-01	TERMINAL, ANTENNA	
66	3-042-815-01	TERMINAL (B), ANTENNA	
67	3-040-357-01	HANDLE	
68	3-028-872-11	PACKING (JACK)	
69	3-040-353-01	CABINET, REAR (US)	
69	3-040-353-11	CABINET, REAR (CND)	

Ref. No.	Part No.	Description	Remark
70	3-040-352-01	PIN,BRACKET (L)	
71	X-3378-021-1	PIN ASSY (L)	
72	3-040-361-01	CAP(R), FOOT	
73	1-533-233-31	HOLDER, FUSE	
* 74	1-675-607-11	DC IN BOARD	
75	3-040-360-01	CAP(L), FOOT	
76	1-529-505-11	SPEAKER (12X6cm)	
77	3-040-362-01	SCREW (IPWII 3X33)	
78	3-017-930-01	PACKING (F/R)	
79	3-042-304-01	CUSHION (LEG)	
80	3-042-305-01	CUSHION, HANDLE	
81	3-043-146-01	CUSHION (ANTENNA)	
82	3-042-831-01	CUSHION (JACK)	
ANT1	1-754-090-11	ANTENNA, TELESCOPIC	
⚠F901	1-533-420-11	FUSE, GLASS CYLINDRICAL(DIA.5) (5A/125V)	
IC601	8-759-445-59	IC BA033T	
Q601	8-729-209-15	TRANSISTOR 2SD2012	

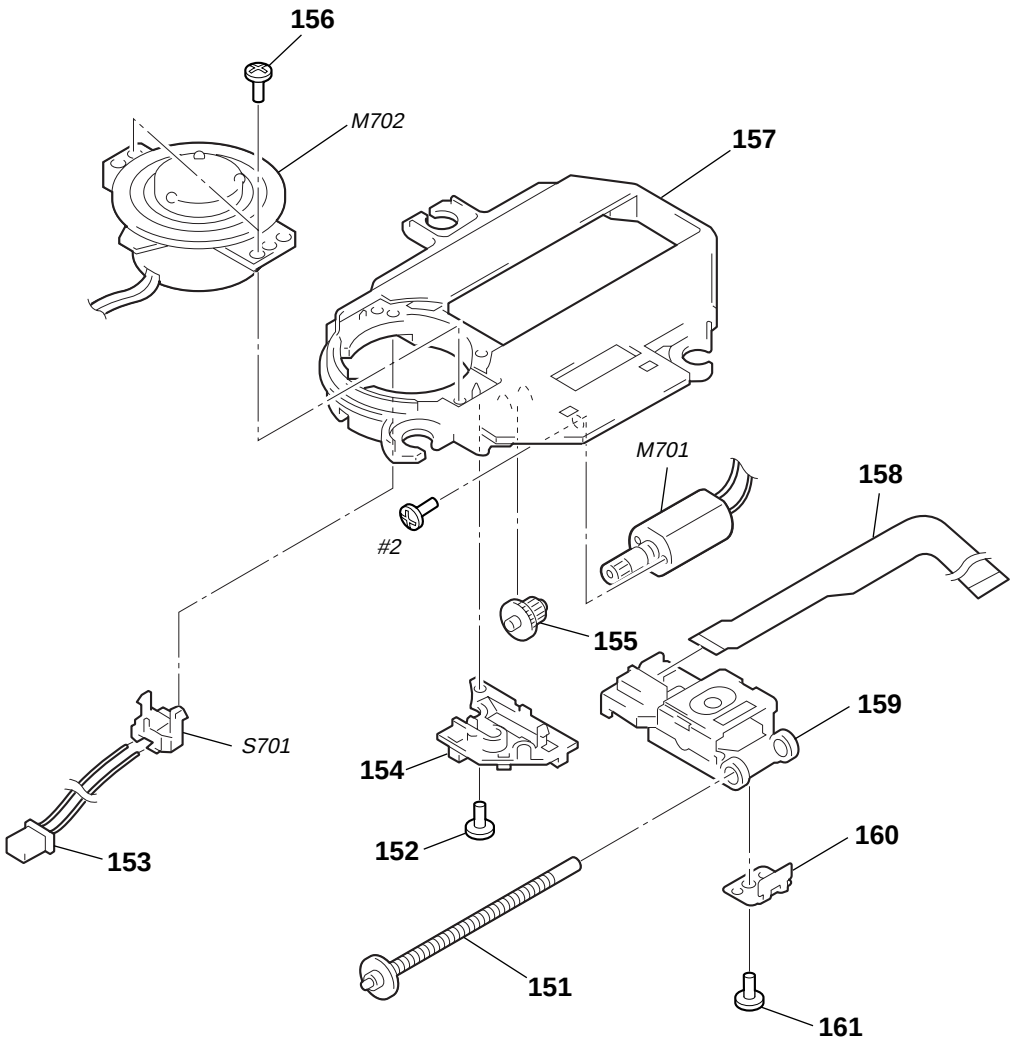
7-3. CD BLOCK SECTION



Ref. No.	Part No.	Description	Remark
101	X-3378-025-1	LID ASSY, CD	
102	3-040-373-01	HOLDER, CD	
103	3-040-375-01	SPRING (CD), TENSION COIL	
104	X-3378-019-1	PINASSY (S)	
105	3-040-377-01	PACKING (CD)	
106	3-040-376-01	PLATE, CD ORNAMENTAL	
107	3-040-731-01	SCREW (+PTPWH 2.6X8)	
108	3-040-394-01	CHASSIS, CD	
109	3-017-930-01	PACKING (F/R)	
110	3-042-826-01	INSURATOR, CD	
111	4-975-762-01	INSULATOR	
112	3-043-515-01	BRACKET (CD)	

Ref. No.	Part No.	Description	Remark
* 113	A-3322-287-A	CD BOARD, COMPLETE	
114	3-040-370-01	BRACKET (SW)	
115	3-040-371-01	SPRING (CD), COMPRESSION	
116	3-040-372-01	SLIDER (CD), PUSH	
* 117	1-675-597-11	OPEN/CLOSE BOARD	
* 118	1-675-595-11	RELAY BOARD	
119	1-791-614-11	WIRE, PARALLEL (FFC) (21 CORE)	
120	3-040-396-01	BRACKET, PIN (S)	
121	3-040-730-01	SCREW (PTPWH 3X8)	
122	3-043-515-11	INSURATOR	
123	3-044-315-01	SCREW, TAPPING +PWH	
124	3-044-314-01	RUBBER (VIBRATION)	

7-4. OPTICAL PICK-UP SECTION (CDM-2411AAA)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
151	A-3303-970-A	SCREW ASSY, FEED	
152	3-318-203-11	SCREW (B1.7), TAPPING	
153	1-690-530-81	LEAD (WITH CONNECTOR)	
154	4-972-163-04	SPRING, SLED	
155	4-974-003-01	GEAR (B)	
156	3-719-401-11	SCREW (B1.7), TAPPING	
157	4-972-162-01	CHASSIS	
158	1-660-965-11	SLIDE FLEXIBLE BOARD	
⚠159	X-4950-060-1	OPTICAL PICK-UP DAX-01A2	
160	4-972-165-01	RACK	
161	4-973-631-01	SCREW	
M701	A-3303-403-A	MOTOR ASSY (SLED) (INCLUDING GEAR)	
M702	A-3303-971-A	MOTOR ASSY, TURN TABLE (SPINDLE)	
S701	1-571-099-21	SWITCH (1 KEY) (LIMIT)	

BATT (L) **BATT (R)** **CD**

SECTION 8
ELECTRICAL PARTS LIST

NOTE :

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE :Metal oxide-film resistor
  F : nonflammable
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ , for example :
  uA.... : µ A.... , uPA.... : µ PA....
  uPB.... : µ PB.... , uPC.... : µ PC....
  uPD.... : µ PD....
- CAPACITORS
  uF : µ F
- COILS
  uH : µ H
- Abbreviation
  CND : Canadian

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	1-675-605-11	BATT (L) BOARD			
		**********			
	3-040-342-01	SPRING (-) (L), BATTERY			
	3-040-343-01	SPRING (-) (S), BATTERY			
**********					
*	1-675-606-11	BATT (R) BOARD			
		**********			
	3-040-342-01	SPRING (-) (L), BATTERY			
	3-040-369-01	SPRING (+) (S), BATTERY			
**********					
*	A-3322-287-A	CD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C701	1-124-584-00	ELECT	100uF	20%	10V
C702	1-162-306-11	CERAMIC	0.01uF	20%	16V
C703	1-162-294-31	CERAMIC	0.001uF	10%	50V
C704	1-136-161-00	MYLAR	0.047uF	5%	50V
C705	1-162-600-11	CERAMIC	0.0047uF	20%	16V
C706	1-162-306-11	CERAMIC	0.01uF	20%	16V
C707	1-126-926-11	ELECT	1000uF	20%	10V
C708	1-162-306-11	CERAMIC	0.01uF	20%	16V
C709	1-162-306-11	CERAMIC	0.01uF	20%	16V
C710	1-136-165-00	MYLAR	0.1uF	5%	50V
C711	1-136-165-00	MYLAR	0.1uF	5%	50V
C712	1-136-157-00	MYLAR	0.022uF	5%	50V
C713	1-124-584-00	ELECT	100uF	20%	10V
C714	1-162-302-11	CERAMIC	0.0022uF	20%	16V
C715	1-136-165-00	MYLAR	0.1uF	5%	50V
C716	1-126-157-11	ELECT	10uF	20%	16V
C717	1-136-165-00	MYLAR	0.1uF	5%	50V
C718	1-136-165-00	MYLAR	0.1uF	5%	50V
C719	1-162-215-31	CERAMIC	47PF	5%	50V
C720	1-124-259-11	ELECT	4.7uF	20%	16V
C721	1-162-306-11	CERAMIC	0.01uF	20%	16V
C722	1-136-159-00	MYLAR	0.033uF	5%	50V
C723	1-136-159-00	MYLAR	0.033uF	5%	50V
C724	1-162-215-31	CERAMIC	47PF	5%	50V
C725	1-162-290-31	CERAMIC	470PF	10%	50V
C726	1-136-156-00	MYLAR	0.018uF	5%	50V
C727	1-136-165-00	MYLAR	0.1uF	5%	50V

Ref. No.	Part No.	Description			Remark
C728	1-162-215-31	CERAMIC	47PF	5%	50V
C729	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C730	1-126-162-11	ELECT	3.3uF	20%	50V
C731	1-136-495-11	MYLAR	0.068uF	5%	50V
C732	1-162-306-11	CERAMIC	0.01uF	20%	16V
C733	1-162-215-31	CERAMIC	47PF	5%	50V
C734	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C735	1-162-306-11	CERAMIC	0.01uF	20%	16V
C736	1-124-584-00	ELECT	100uF	20%	10V
C737	1-162-282-31	CERAMIC	100PF	10%	50V
C738	1-162-282-31	CERAMIC	100PF	10%	50V
C739	1-162-282-31	CERAMIC	100PF	10%	50V
C740	1-162-306-11	CERAMIC	0.01uF	20%	16V
C741	1-128-057-11	ELECT	330uF	20%	6.3V
C742	1-162-282-31	CERAMIC	100PF	10%	50V
C743	1-136-169-00	MYLAR	0.22uF	5%	50V
C744	1-136-155-00	FILM	0.015uF	5%	50V
C745	1-162-302-11	CERAMIC	0.0022uF	20%	16V
C746	1-162-286-21	CERAMIC	220PF	10%	50V
C747	1-136-169-00	MYLAR	0.22uF	5%	50V
C748	1-137-194-91	MYLAR	0.47uF	5%	50V
C749	1-162-306-11	CERAMIC	0.01uF	20%	16V
C750	1-136-165-00	MYLAR	0.1uF	5%	50V
C751	1-136-155-00	FILM	0.015uF	5%	50V
C752	1-162-306-11	CERAMIC	0.01uF	20%	16V
C753	1-162-288-31	CERAMIC	330PF	10%	50V
C754	1-162-288-31	CERAMIC	330PF	10%	50V
C755	1-162-288-31	CERAMIC	330PF	10%	50V
C756	1-162-294-31	CERAMIC	0.001uF	10%	50V
C757	1-162-306-11	CERAMIC	0.01uF	20%	16V
C758	1-162-288-31	CERAMIC	330PF	10%	50V
C759	1-162-306-11	CERAMIC	0.01uF	20%	16V
C760	1-162-282-31	CERAMIC	100PF	10%	50V
C761	1-162-288-31	CERAMIC	330PF	10%	50V
C762	1-162-306-11	CERAMIC	0.01uF	20%	16V
C763	1-162-282-31	CERAMIC	100PF	10%	50V
C764	1-162-306-11	CERAMIC	0.01uF	20%	16V
C765	1-162-306-11	CERAMIC	0.01uF	20%	16V
C767	1-162-201-31	CERAMIC	12PF	5%	50V
C768	1-162-201-31	CERAMIC	12PF	5%	50V
C770	1-126-176-11	ELECT	220uF	20%	10V
C771	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C772	1-162-302-11	CERAMIC	0.0022uF	30%	16V

Ref. No.	Part No.	Description			Remark
C773	1-126-157-11	ELECT	10uF	20%	16V
C774	1-126-157-11	ELECT	10uF	20%	16V
C775	1-162-282-31	CERAMIC	100PF	10%	50V
C776	1-162-306-11	CERAMIC	0.01uF	20%	16V
C777	1-126-176-11	ELECT	220uF	20%	10V
C778	1-162-288-31	CERAMIC	330PF	10%	50V
C779	1-162-282-31	CERAMIC	100PF	10%	50V
C780	1-162-288-31	CERAMIC	330PF	10%	50V
C781	1-162-306-11	CERAMIC	0.01uF	20%	16V
C782	1-162-288-31	CERAMIC	330PF	10%	50V
C783	1-162-282-31	CERAMIC	100PF	10%	50V
C784	1-136-169-00	MYLAR	0.22uF	5%	50V
C785	1-162-306-11	CERAMIC	0.01uF	20%	16V
C786	1-126-916-11	ELECT	1000uF	20%	6.3V
C787	1-162-282-31	CERAMIC	100PF	10%	50V
C788	1-126-157-11	ELECT	10uF	20%	16V
C789	1-162-294-31	CERAMIC	0.001uF	10%	50V
C790	1-162-290-31	CERAMIC	470PF	10%	50V
C791	1-126-157-11	ELECT	10uF	20%	16V
C792	1-128-057-11	ELECT	330uF	20%	6.3V
		< CONNECTOR >			
CN701	1-563-624-11	HOUSING, CONNECTOR 21P			
CN702	1-691-049-21	HOUSING, CONNECTOR 17P			
* CN704	1-580-154-11	PIN, CONNECTOR (PC BOARD) 2P			
		< DIODE >			
D701	8-719-991-33	DIODE 1SS133T-77			
D702	8-719-050-84	DIODE RB441Q-40T-77			
		< FERRITE BEAD >			
FB701	1-410-397-21	FERRITE BEAD INDUCTOR			
FB702	1-410-397-21	FERRITE BEAD INDUCTOR			
FB703	1-410-397-21	FERRITE BEAD INDUCTOR			
		< IC >			
IC701	8-752-083-24	IC CXA2542AQ			
IC702	8-752-387-78	IC CXD3009Q			
IC703	8-759-591-62	IC BA6998FP-E2			
IC704	8-759-581-78	IC SM5904BF			
		< COIL >			
L701	1-414-142-11	INDUCTOR	1uH		
L703	1-414-142-11	INDUCTOR	1uH		
L705	1-414-142-11	INDUCTOR	1uH		
L707	1-410-509-11	INDUCTOR	10uH		
		< TRANSISTOR >			
Q701	8-729-037-03	TRANSISTOR KTA1266GR-AT			
Q702	8-729-922-66	TRANSISTOR 2SC2410SN			
Q703	8-729-904-34	TRANSISTOR DTA114TS			
Q704	8-729-036-77	TRANSISTOR KRC107M			
		< RESISTOR >			
R700	1-247-863-91	CARBON	22K	5%	1/4W
R701	1-249-425-11	CARBON	4.7K	5%	1/4W
R702	1-247-863-91	CARBON	22K	5%	1/4W
R703	1-247-899-11	CARBON	680K	5%	1/4W
R704	1-249-431-11	CARBON	15K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R705	1-247-887-00	CARBON	220K	5%	1/4W
R706	1-247-891-00	CARBON	330K	5%	1/4W
R707	1-247-891-00	CARBON	330K	5%	1/4W
R708	1-247-903-00	CARBON	1M	5%	1/4W
R709	1-249-437-11	CARBON	47K	5%	1/4W
R710	1-247-896-11	CARBON	510K	5%	1/4W
R711	1-247-883-00	CARBON	150K	5%	1/4W
R712	1-247-887-00	CARBON	220K	5%	1/4W
R713	1-249-437-11	CARBON	47K	5%	1/4W
R714	1-249-435-11	CARBON	33K	5%	1/4W
R715	1-249-439-11	CARBON	68K	5%	1/4W
R716	1-249-441-11	CARBON	100K	5%	1/4W
R717	1-249-441-11	CARBON	100K	5%	1/4W
R718	1-249-413-11	CARBON	470	5%	1/4W
R719	1-249-413-11	CARBON	470	5%	1/4W
R720	1-247-831-91	CARBON	1K	5%	1/4W
R721	1-249-437-11	CARBON	47K	5%	1/4W
R722	1-249-437-11	CARBON	47K	5%	1/4W
R723	1-249-437-11	CARBON	47K	5%	1/4W
R724	1-249-437-11	CARBON	47K	5%	1/4W
R725	1-247-883-00	CARBON	150K	5%	1/4W
R726	1-247-883-00	CARBON	150K	5%	1/4W
R727	1-247-887-00	CARBON	220K	5%	1/4W
R728	1-247-883-00	CARBON	150K	5%	1/4W
R729	1-247-831-91	CARBON	1K	5%	1/4W
R730	1-247-883-00	CARBON	150K	5%	1/4W
R731	1-249-425-11	CARBON	4.7K	5%	1/4W
R732	1-249-429-11	CARBON	10K	5%	1/4W
R733	1-249-441-11	CARBON	100K	5%	1/4W
R734	1-249-393-11	CARBON	10	5%	1/4W
R735	1-249-425-11	CARBON	4.7K	5%	1/4W
R736	1-249-437-11	CARBON	47K	5%	1/4W
R739	1-247-831-91	CARBON	1K	5%	1/4W
R740	1-247-831-91	CARBON	1K	5%	1/4W
R741	1-247-887-00	CARBON	220K	5%	1/4W
R742	1-247-883-00	CARBON	150K	5%	1/4W
R743	1-247-887-00	CARBON	220K	5%	1/4W
R745	1-247-891-00	CARBON	330K	5%	1/4W
R747	1-249-421-11	CARBON	2.2K	5%	1/4W
R750	1-249-429-11	CARBON	10K	5%	1/4W
R751	1-249-429-11	CARBON	10K	5%	1/4W
R752	1-249-435-11	CARBON	33K	5%	1/4W
R753	1-247-831-91	CARBON	1K	5%	1/4W
R754	1-247-863-91	CARBON	22K	5%	1/4W
R755	1-249-435-11	CARBON	33K	5%	1/4W
R756	1-249-431-11	CARBON	15K	5%	1/4W
R758	1-249-421-11	CARBON	2.2K	5%	1/4W
R760	1-249-441-11	CARBON	100K	5%	1/4W
R763	1-247-831-91	CARBON	1K	5%	1/4W
R764	1-249-425-11	CARBON	4.7K	5%	1/4W
R765	1-249-426-11	CARBON	5.6K	5%	1/4W
R766	1-247-903-00	CARBON	1M	5%	1/4W
R767	1-249-429-11	CARBON	10K	5%	1/4W
R768	1-247-887-00	CARBON	220K	5%	1/4W
R770	1-247-831-91	CARBON	1K	5%	1/4W
R771	1-249-429-11	CARBON	10K	5%	1/4W
R774	1-249-421-11	CARBON	2.2K	5%	1/4W
R776	1-249-429-11	CARBON	10K	5%	1/4W

CD CONTROL

Ref. No.	Part No.	Description			Remark
R777	1-247-831-91	CARBON	1K	5%	1/4W
R778	1-247-831-91	CARBON	1K	5%	1/4W
R780	1-247-831-91	CARBON	1K	5%	1/4W
R781	1-249-437-11	CARBON	47K	5%	1/4W
R787	1-247-831-91	CARBON	1K	5%	1/4W
R788	1-247-831-91	CARBON	1K	5%	1/4W
R789	1-247-831-91	CARBON	1K	5%	1/4W
R790	1-247-831-91	CARBON	1K	5%	1/4W
R793	1-247-831-91	CARBON	1K	5%	1/4W
R794	1-249-413-11	CARBON	470	5%	1/4W
R795	1-247-815-91	CARBON	220	5%	1/4W
R796	1-247-831-91	CARBON	1K	5%	1/4W
R797	1-247-831-91	CARBON	1K	5%	1/4W
R798	1-247-831-91	CARBON	1K	5%	1/4W
R799	1-247-831-91	CARBON	1K	5%	1/4W
		< VIBRATOR >			
X701	1-579-345-11	VIBRATOR, CERAMIC (16.9344MHz)			
**********					
*	A-3322-282-A	CONTROL BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C801	1-125-507-11	CAPACITOR	0.22F		5.5V
C802	1-124-589-11	ELECT	47uF	20%	16V
C803	1-126-160-11	ELECT	1uF	20%	50V
C804	1-102-962-00	CERAMIC	30PF	5%	50V
C805	1-102-962-00	CERAMIC	30PF	5%	50V
C806	1-162-199-31	CERAMIC	10PF	5%	50V
C807	1-162-201-31	CERAMIC	12PF	5%	50V
C809	1-162-851-11	CERAMIC	0.1uF	10%	16V
C810	1-128-647-11	CAPACITOR	0.1F		5.5V
C811	1-162-306-11	CERAMIC	0.01uF	30%	16V
C812	1-162-306-11	CERAMIC	0.01uF	30%	16V
C813	1-162-306-11	CERAMIC	0.01uF	30%	16V
C814	1-136-165-00	MYLAR	0.1uF	5%	50V
C815	1-137-194-91	MYLAR	0.47uF	5%	50V
C816	1-162-306-11	CERAMIC	0.01uF	30%	16V
		< CONNECTOR >			
CN801	1-563-624-11	HOUSING, CONNECTOR 21P			
CN802	1-691-649-11	SOCKET, CONNECTOR 17P			
* CN803	1-580-154-11	PIN, CONNECTOR (PC BOARD) 2P			
* CN804	1-566-779-11	PIN, CONNECTOR (PC BOARD) 4P			
		< DIODE >			
D802	8-719-050-84	DIODE RB441Q-40T-77			
		< IC >			
IC801	8-752-912-10	IC CXP83620-016Q			
IC802	8-759-658-46	IC S81233SGY-Z			
IC803	8-759-645-87	IC PST9128-T			
		< COIL >			
L801	1-414-142-11	INDUCTOR	1uH		
L802	1-410-509-11	INDUCTOR	10uH		
L803	1-414-142-11	INDUCTOR	1uH		
		< LIQUID CRYSTAL DISPLAY >			
LCD801	1-803-794-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< TRANSISTOR >			
Q801	8-729-036-77	TRANSISTOR KRC107M			
Q802	8-729-036-77	TRANSISTOR KRC107M			
Q803	8-729-012-83	TRANSISTOR 2SK679A			
Q804	8-729-119-78	TRANSISTOR 2SC403SP-51			
Q805	8-729-119-78	TRANSISTOR 2SC403SP-51			
Q806	8-729-119-78	TRANSISTOR 2SC403SP-51			
Q807	8-729-119-76	TRANSISTOR 2SA1175-HFE			
		< RESISTOR >			
R801	1-247-831-91	CARBON	1K	5%	1/4W
R802	1-247-831-91	CARBON	1K	5%	1/4W
R803	1-247-831-91	CARBON	1K	5%	1/4W
R804	1-247-887-00	CARBON	220K	5%	1/4W
R805	1-247-831-91	CARBON	1K	5%	1/4W
R806	1-247-831-91	CARBON	1K	5%	1/4W
R807	1-247-831-91	CARBON	1K	5%	1/4W
R808	1-247-831-91	CARBON	1K	5%	1/4W
R809	1-247-831-91	CARBON	1K	5%	1/4W
R810	1-247-831-91	CARBON	1K	5%	1/4W
R811	1-247-831-91	CARBON	1K	5%	1/4W
R812	1-247-831-91	CARBON	1K	5%	1/4W
R813	1-247-831-91	CARBON	1K	5%	1/4W
R814	1-247-831-91	CARBON	1K	5%	1/4W
R815	1-247-831-91	CARBON	1K	5%	1/4W
R817	1-247-831-91	CARBON	1K	5%	1/4W
R818	1-247-831-91	CARBON	1K	5%	1/4W
R819	1-247-831-91	CARBON	1K	5%	1/4W
R820	1-247-831-91	CARBON	1K	5%	1/4W
R822	1-249-425-11	CARBON	4.7K	5%	1/4W
R823	1-249-425-11	CARBON	4.7K	5%	1/4W
R824	1-249-425-11	CARBON	4.7K	5%	1/4W
R825	1-249-425-11	CARBON	4.7K	5%	1/4W
R826	1-247-831-91	CARBON	1K	5%	1/4W
R827	1-247-891-00	CARBON	330K	5%	1/4W
R828	1-247-831-91	CARBON	1K	5%	1/4W
R829	1-247-831-91	CARBON	1K	5%	1/4W
R830	1-249-425-11	CARBON	4.7K	5%	1/4W
R834	1-249-441-11	CARBON	100K	5%	1/4W
R835	1-247-883-00	CARBON	150K	5%	1/4W
R836	1-247-883-00	CARBON	150K	5%	1/4W
R837	1-247-883-00	CARBON	150K	5%	1/4W
R839	1-249-413-11	CARBON	470	5%	1/4W
R863	1-247-831-91	CARBON	1K	5%	1/4W
R864	1-247-831-91	CARBON	1K	5%	1/4W
R865	1-247-831-91	CARBON	1K	5%	1/4W
R866	1-247-807-31	CARBON	100	5%	1/4W
R867	1-249-421-11	CARBON	2.2K	5%	1/4W
R868	1-247-831-91	CARBON	1K	5%	1/4W
R869	1-247-831-91	CARBON	1K	5%	1/4W
R870	1-247-831-91	CARBON	1K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R871	1-247-831-91	CARBON	1K	5%	1/4W
R872	1-247-887-00	CARBON	220K	5%	1/4W
R876	1-247-807-31	CARBON	100	5%	1/4W
R877	1-249-441-11	CARBON	100K	5%	1/4W
R879	1-247-831-91	CARBON	1K	5%	1/4W
R880	1-247-831-91	CARBON	1K	5%	1/4W
R881	1-249-439-11	CARBON	68K	5%	1/4W
R882	1-247-807-31	CARBON	100	5%	1/4W
R890	1-249-437-11	CARBON	47K	5%	1/4W
R891	1-247-903-00	CARBON	1M	5%	1/4W
R893	1-247-891-00	CARBON	330K	5%	1/4W
R894	1-247-895-91	CARBON	470K	5%	1/4W
R895	1-247-901-11	CARBON	820K	5%	1/4W
R896	1-247-883-00	CARBON	150K	5%	1/4W
R898	1-247-887-00	CARBON	220K	5%	1/4W
R899	1-247-891-00	CARBON	330K	5%	1/4W
		< VIBRATOR >			
X801	1-767-184-11	VIBRATOR, CERAMIC (4.19MHz)			
X802	1-781-592-11	VIBRATOR, CRYSTAL (32.768kHz)			
**********					
*	1-675-607-11	DC IN BOARD **********			
	1-533-233-31	HOLDER, FUSE			
		< CONNECTOR >			
* CN901	1-774-957-11	PIN, CONNECTOR (PC BOARD) 11P			
* CN902	1-564-506-11	PLUG, CONNECTOR 3P			
* CN903	1-564-505-11	PLUG, CONNECTOR 2P			
* CN904	1-580-154-11	PIN, CONNECTOR (PC BOARD) 2P			
* CN905	1-580-158-11	PIN, CONNECTOR (PC BOARD) 6P			
		< DIODE >			
D901	8-719-200-02	DIODE 10E2			
		< FUSE >			
⚠F901	1-533-420-11	FUSE, GLASS CYLINDRICAL(DIA.5) (5A/125V)			
		< JACK >			
J901	1-774-741-11	JACK, DC (DC IN 10.6-12V)			
**********					
*	1-675-601-11	HEADPHONE BOARD **********			
		< CAPACITOR >			
C150	1-124-589-11	ELECT	47uF	20%	16V
C250	1-124-589-11	ELECT	47uF	20%	16V
		< CONNECTOR >			
* CN501	1-564-521-11	PLUG, CONNECTOR 6P			
* CN502	1-564-517-11	PLUG, CONNECTOR 2P			
		< JACK >			
J501	1-566-891-11	JACK (🎧)			

Ref. No.	Part No.	Description			Remark
		< TRANSISTOR >			
Q150	8-729-905-50	TRANSISTOR DTC343TS			
Q250	8-729-905-50	TRANSISTOR DTC343TS			
		< RESISTOR >			
R150	1-249-404-00	CARBON	82	5%	1/4W
R250	1-249-404-00	CARBON	82	5%	1/4W
**********					
*	A-3322-285-A	MAIN BOARD, COMPLETE **********			
	7-685-647-79	SCREW, TAPPING +BV 3X10			
		< CAPACITOR >			
C101	1-126-960-11	ELECT	1uF	20%	50V
C103	1-162-849-11	CERAMIC	0.068uF	10%	16V
C104	1-162-849-11	CERAMIC	0.068uF	10%	16V
C105	1-162-837-11	CERAMIC	0.0068uF	10%	16V
C106	1-104-664-11	ELECT	47uF	20%	10V
C107	1-104-664-11	ELECT	47uF	20%	10V
C108	1-162-294-31	CERAMIC	0.001uF	10%	50V
C109	1-126-960-11	ELECT	1uF	20%	50V
C110	1-136-165-00	MYLAR	0.1uF	5%	50V
C111	1-136-165-00	MYLAR	0.1uF	5%	50V
C112	1-162-282-31	CERAMIC	100PF	10%	50V
C113	1-162-282-31	CERAMIC	100PF	10%	50V
C117	1-126-964-11	ELECT	10uF	20%	50V
C201	1-126-960-11	ELECT	1uF	20%	50V
C203	1-162-849-11	CERAMIC	0.068uF	10%	16V
C204	1-162-849-11	CERAMIC	0.068uF	10%	16V
C205	1-162-837-11	CERAMIC	0.0068uF	10%	16V
C206	1-104-664-11	ELECT	47uF	20%	10V
C207	1-104-664-11	ELECT	47uF	20%	10V
C208	1-162-294-31	CERAMIC	0.001uF	10%	50V
C209	1-126-960-11	ELECT	1uF	20%	50V
C210	1-136-165-00	MYLAR	0.1uF	5%	50V
C211	1-136-165-00	MYLAR	0.1uF	5%	50V
C212	1-162-282-31	CERAMIC	100PF	10%	50V
C213	1-162-282-31	CERAMIC	100PF	10%	50V
C217	1-126-964-11	ELECT	10uF	20%	50V
C300	1-126-943-11	ELECT	2200uF	20%	25V
C301	1-126-934-11	ELECT	220uF	20%	10V
C302	1-126-934-11	ELECT	220uF	20%	10V
C303	1-104-664-11	ELECT	47uF	20%	10V
C304	1-126-926-11	ELECT	1000uF	20%	10V
C305	1-162-843-11	CERAMIC	0.022uF	10%	16V
C306	1-126-963-11	ELECT	4.7uF	20%	50V
C307	1-104-664-11	ELECT	47uF	20%	10V
C308	1-126-960-11	ELECT	1uF	20%	50V
C309	1-104-664-11	ELECT	47uF	20%	10V
C310	1-126-963-11	ELECT	4.7uF	20%	50V
C311	1-104-664-11	ELECT	47uF	20%	10V
C312	1-128-551-11	ELECT	22uF	20%	25V
C313	1-128-551-11	ELECT	22uF	20%	25V
C317	1-126-940-11	ELECT	330uF	20%	25V
C318	1-162-851-11	CERAMIC	0.1uF	10%	16V

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

MAIN

Ref. No.	Part No.	Description			Remark
C319	1-126-963-11	ELECT	4.7uF	20%	50V
C320	1-104-665-11	ELECT	100uF	20%	10V
C321	1-104-664-11	ELECT	47uF	20%	10V
C322	1-104-664-11	ELECT	47uF	20%	10V
C323	1-162-851-11	CERAMIC	0.1uF	10%	16V
		< CONNECTOR >			
CN301	1-691-043-21	HOUSING, CONNECTOR 11P			
* CN302	1-691-053-21	HOUSING, CONNECTOR 21P			
* CN303	1-580-158-11	PIN, CONNECTOR (PC BOARD) 6P			
* CN304	1-564-505-11	PLUG, CONNECTOR 2P			
		< DIODE >			
D101	8-719-991-33	DIODE 1SS133T-77			
D102	8-719-991-33	DIODE 1SS133T-77			
D201	8-719-991-33	DIODE 1SS133T-77			
D202	8-719-991-33	DIODE 1SS133T-77			
D301	8-719-050-84	DIODE RB441Q-40T-77			
D302	8-719-110-49	DIODE RD18ES-B2			
D304	8-719-991-33	DIODE 1SS133T-77			
D307	8-719-991-33	DIODE 1SS133T-77			
D308	8-719-991-33	DIODE 1SS133T-77			
D309	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC301	8-759-432-41	IC BH3854AS			
IC302	8-759-333-16	IC LA4705NA			
IC303	8-759-553-50	IC S-81256PG-Z			
		< COIL >			
L301	1-412-848-11	INDUCTOR	22uH		
		< TRANSISTOR >			
Q102	8-729-905-50	TRANSISTOR DTC343TS			
Q104	8-729-905-50	TRANSISTOR DTC343TS			
Q105	8-729-905-50	TRANSISTOR DTC343TS			
Q202	8-729-905-50	TRANSISTOR DTC343TS			
Q204	8-729-905-50	TRANSISTOR DTC343TS			
Q205	8-729-905-50	TRANSISTOR DTC343TS			
Q301	8-729-037-34	TRANSISTOR KRA107M			
Q302	8-729-801-84	TRANSISTOR 2SB1013-4			
Q303	8-729-036-77	TRANSISTOR KRC107M			
Q304	8-729-801-84	TRANSISTOR 2SB1013-4			
Q305	8-729-037-34	TRANSISTOR KRA107M			
Q306	8-729-036-77	TRANSISTOR KRC107M			
Q307	8-729-036-89	TRANSISTOR KTC3198GR-AT			
Q308	8-729-036-89	TRANSISTOR KTC3198GR-AT			
Q309	8-729-036-89	TRANSISTOR KTC3198GR-AT			
Q310	8-729-036-77	TRANSISTOR KRC107M			
Q311	8-729-036-77	TRANSISTOR KRC107M			
Q312	8-729-036-77	TRANSISTOR KRC107M			
Q313	8-729-037-34	TRANSISTOR KRA107M			
Q314	8-729-037-34	TRANSISTOR KRA107M			
Q316	8-729-037-34	TRANSISTOR KRA107M			
Q317	8-729-036-77	TRANSISTOR KRC107M			
Q318	8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q319	8-729-119-78	TRANSISTOR 2SC403SP-51			
Q320	8-729-119-78	TRANSISTOR 2SC403SP-51			

Ref. No.	Part No.	Description			Remark
Q321	8-729-037-34	TRANSISTOR KRA107M			
Q322	8-729-036-77	TRANSISTOR KRC107M			
Q323	8-729-036-77	TRANSISTOR KRC107M			
Q324	8-729-801-84	TRANSISTOR 2SB1013-4			
Q325	8-729-119-76	TRANSISTOR 2SA1175-HFE			
		< RESISTOR >			
R103	1-249-431-11	CARBON	15K	5%	1/4W
R104	1-249-425-11	CARBON	4.7K	5%	1/4W
R105	1-249-431-11	CARBON	15K	5%	1/4W
R107	1-249-425-11	CARBON	4.7K	5%	1/4W
R108	1-249-429-11	CARBON	10K	5%	1/4W
R109	1-247-843-11	CARBON	3.3K	5%	1/4W
R110	1-249-385-11	CARBON	2.2	5%	1/6W
R111	1-249-385-11	CARBON	2.2	5%	1/6W
R112	1-247-895-91	CARBON	470K	5%	1/4W
R113	1-249-432-11	CARBON	18K	5%	1/4W
R114	1-249-425-11	CARBON	4.7K	5%	1/4W
R203	1-249-431-11	CARBON	15K	5%	1/4W
R204	1-249-425-11	CARBON	4.7K	5%	1/4W
R205	1-249-431-11	CARBON	15K	5%	1/4W
R207	1-249-425-11	CARBON	4.7K	5%	1/4W
R208	1-249-429-11	CARBON	10K	5%	1/4W
R209	1-247-843-11	CARBON	3.3K	5%	1/4W
R210	1-249-385-11	CARBON	2.2	5%	1/6W
R211	1-249-385-11	CARBON	2.2	5%	1/6W
R212	1-247-895-91	CARBON	470K	5%	1/4W
R213	1-249-432-11	CARBON	18K	5%	1/4W
R214	1-249-425-11	CARBON	4.7K	5%	1/4W
R301	1-249-401-11	CARBON	47	5%	1/4W
R302	1-249-429-11	CARBON	10K	5%	1/4W
R303	1-249-429-11	CARBON	10K	5%	1/4W
R304	1-249-429-11	CARBON	10K	5%	1/4W
R305	1-249-432-11	CARBON	18K	5%	1/4W
R306	1-249-441-11	CARBON	100K	5%	1/4W
R307	1-249-429-11	CARBON	10K	5%	1/4W
R308	1-247-903-00	CARBON	1M	5%	1/4W
R309	1-247-903-00	CARBON	1M	5%	1/4W
R310	1-247-843-11	CARBON	3.3K	5%	1/4W
R311	1-247-899-11	CARBON	680K	5%	1/4W
R312	1-249-407-11	CARBON	150	5%	1/4W
R313	1-249-418-11	CARBON	1.2K	5%	1/4W
R314	1-247-889-00	CARBON	270K	5%	1/4W
R315	1-247-891-00	CARBON	330K	5%	1/4W
R317	1-249-441-11	CARBON	100K	5%	1/4W
R318	1-249-425-11	CARBON	4.7K	5%	1/4W
R320	1-249-437-11	CARBON	47K	5%	1/4W
R321	1-249-429-11	CARBON	10K	5%	1/4W
R322	1-249-437-11	CARBON	47K	5%	1/4W
R323	1-249-429-11	CARBON	10K	5%	1/4W
R324	1-249-441-11	CARBON	100K	5%	1/4W
R325	1-249-425-11	CARBON	4.7K	5%	1/4W
R326	1-247-831-91	CARBON	1K	5%	1/4W
R327	1-249-413-11	CARBON	470	5%	1/4W
R328	1-247-881-00	CARBON	120K	5%	1/4W
R329	1-249-441-11	CARBON	100K	5%	1/4W
R330	1-249-430-11	CARBON	12K	5%	1/4W
R331	1-249-441-11	CARBON	100K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R332	1-247-895-91	CARBON	470K	5%	1/4W
R333	1-247-887-00	CARBON	220K	5%	1/4W
R334	1-249-421-11	CARBON	2.2K	5%	1/4W
R335	1-247-815-91	CARBON	220	5%	1/4W
R336	1-249-429-11	CARBON	10K	5%	1/4W
R337	1-249-411-11	CARBON	330	5%	1/4W
R338	1-247-887-00	CARBON	220K	5%	1/4W

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*	1-675-597-11	OPEN/CLOSE BOARD	
		**********	
		< SWITCH >	
S702	1-572-085-11	SWITCH, LEAF (OPEN/CLOSE)	

****

*	1-675-588-11	REGULATOR BOARD	
		**********	
		< CAPACITOR >	
C601	1-162-851-11	CERAMIC	0.1uF 10% 16V
C602	1-126-934-11	ELECT	220uF 20% 10V
C603	1-104-664-11	ELECT	47uF 20% 10V
C604	1-104-664-11	ELECT	47uF 20% 10V
C605	1-162-851-11	CERAMIC	0.1uF 10% 16V
C606	1-126-934-11	ELECT	220uF 20% 10V
C607	1-162-851-11	CERAMIC	0.1uF 10% 16V
C608	1-162-851-11	CERAMIC	0.1uF 10% 16V
C609	1-104-665-11	ELECT	100uF 20% 10V
		< DIODE >	
D601	8-719-110-03	DIODE RD7.5ESB2	
D602	8-719-991-33	DIODE 1SS133T-77	
D603	8-719-110-03	DIODE RD7.5ESB2	
		< IC >	
IC601	8-759-445-59	IC BA033T	
		< TRANSISTOR >	
Q601	8-729-209-15	TRANSISTOR 2SD2012	
Q602	8-729-036-86	TRANSISTOR KTC3203Y-AT	
		< RESISTOR >	
R601	1-249-407-11	CARBON	150 5% 1/4W
R602	1-247-815-91	CARBON	220 5% 1/4W

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*	1-675-595-11	RELAY BOARD	
		**********	
		< CONNECTOR >	
CN705	1-566-757-11	PIN, CONNECTOR (PC BOARD) 2P	
CN706	1-566-757-11	PIN, CONNECTOR (PC BOARD) 2P	
CN707	1-566-757-11	PIN, CONNECTOR (PC BOARD) 2P	
CN708	1-779-551-11	CONNECTOR,FFC(LIF(NON-ZIF))14P	
CN709	1-770-528-31	CONNECTOR, FFC/FPC 21P	

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Ref. No.	Part No.	Description			Remark
*	1-675-600-11	RESET BOARD			
		**********			
		< SWITCH >			
S901	1-692-014-11	SWITCH, KEY BOARD (RESET)			

****

*	A-3322-289-A	SW (1) BOARD, COMPLETE			
		**********			
		< DIODE >			
D801	8-719-074-42	LED SLR325VR-T31 (OPR/BATT)			
		< RESISTOR >			
R840	1-249-415-11	CARBON	680	5%	1/4W
R841	1-249-416-11	CARBON	820	5%	1/4W
R842	1-249-418-11	CARBON	1.2K	5%	1/4W
R843	1-247-837-91	CARBON	1.8K	5%	1/4W
R844	1-247-843-11	CARBON	3.3K	5%	1/4W
R845	1-249-427-11	CARBON	6.8K	5%	1/4W
R846	1-249-415-11	CARBON	680	5%	1/4W
R847	1-249-416-11	CARBON	820	5%	1/4W
R848	1-249-418-11	CARBON	1.2K	5%	1/4W
R849	1-247-837-91	CARBON	1.8K	5%	1/4W
R850	1-247-843-11	CARBON	3.3K	5%	1/4W
R851	1-249-427-11	CARBON	6.8K	5%	1/4W
R858	1-249-407-11	CARBON	150	5%	1/4W
R859	1-249-432-11	CARBON	18K	5%	1/4W
		< SWITCH >			
S801	1-692-014-11	SWITCH, KEY BOARD (POWER)			
S802	1-692-014-11	SWITCH, KEY BOARD (BAND)			
S803	1-692-014-11	SWITCH, KEY BOARD (PRESET -)			
S804	1-692-014-11	SWITCH, KEY BOARD (PRESET +)			
S805	1-692-014-11	SWITCH, KEY BOARD (DISPLAY ENTER)			
S806	1-692-014-11	SWITCH, KEY BOARD (MONO/ST MODE)			
S807	1-692-014-11	SWITCH, KEY BOARD (ESP)			
S808	1-692-014-11	SWITCH, KEY BOARD (■)			
S809	1-692-014-11	SWITCH, KEY BOARD (►II)			
S810	1-692-014-11	SWITCH, KEY BOARD (TIME SET TUNING -)			
S811	1-692-014-11	SWITCH, KEY BOARD (TIME SET TUNING +)			
S812	1-692-014-11	SWITCH, KEY BOARD (VOL +)			
S813	1-692-014-11	SWITCH, KEY BOARD (VOL -)			

****

*	1-675-596-11	SW (2) BOARD			
		**********			
		< RESISTOR >			
R852	1-249-415-11	CARBON	680	5%	1/4W
R853	1-249-416-11	CARBON	820	5%	1/4W
R854	1-249-418-11	CARBON	1.2K	5%	1/4W
R855	1-247-837-91	CARBON	1.8K	5%	1/4W
R856	1-247-843-11	CARBON	3.3K	5%	1/4W
R857	1-249-427-11	CARBON	6.8K	5%	1/4W
		< SWITCH >			
S814	1-692-014-11	SWITCH, KEY BOARD (CLOCK)			

SW (2) TUNER

Ref. No.	Part No.	Description			Remark
S815	1-692-014-11	SWITCH, KEY BOARD (TIMER)			
S816	1-692-014-11	SWITCH, KEY BOARD (STANDBY)			
S817	1-692-014-11	SWITCH, KEY BOARD (SLEEP)			
S818	1-692-014-11	SWITCH, KEY BOARD (ALARM)			
S819	1-692-014-11	SWITCH, KEY BOARD (SOUND)			
S820	1-692-014-11	SWITCH, KEY BOARD (MEGA BASS)			
**********					
*	A-3322-284-A	TUNER BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C3	1-162-301-11	CERAMIC	0.0015uF	30%	16V
C4	1-162-282-31	CERAMIC	100PF	10%	50V
C5	1-162-282-31	CERAMIC	100PF	10%	50V
C6	1-162-282-31	CERAMIC	100PF	10%	50V
C7	1-162-282-31	CERAMIC	100PF	10%	50V
C10	1-126-160-11	ELECT	1uF	20%	50V
C11	1-162-294-31	CERAMIC	0.001uF	10%	50V
C12	1-126-163-11	ELECT	4.7uF	20%	50V
C13	1-162-306-11	CERAMIC	0.01uF	30%	16V
C14	1-161-055-00	CERAMIC	0.022uF	10%	50V
C15	1-161-055-00	CERAMIC	0.022uF	10%	50V
C16	1-126-160-11	ELECT	1uF	20%	50V
C17	1-126-160-11	ELECT	1uF	20%	50V
C18	1-126-176-11	ELECT	220uF	20%	10V
C20	1-162-851-11	CERAMIC	0.1uF		16V
C21	1-124-465-00	ELECT	0.47uF	20%	50V
C22	1-162-851-11	CERAMIC	0.1uF		16V
C23	1-126-160-11	ELECT	1uF	20%	50V
C24	1-162-288-31	CERAMIC	330PF	10%	50V
C25	1-162-306-11	CERAMIC	0.01uF	30%	16V
C26	1-162-306-11	CERAMIC	0.01uF	30%	16V
C30	1-162-306-11	CERAMIC	0.01uF	30%	16V
C31	1-102-514-11	CERAMIC	22PF	5%	50V
C32	1-162-294-31	CERAMIC	0.001uF	10%	50V
C33	1-162-282-31	CERAMIC	100PF	10%	50V
C34	1-162-294-31	CERAMIC	0.001uF	10%	50V
C35	1-164-159-21	CERAMIC	0.1uF		50V
C40	1-162-851-11	CERAMIC	0.1uF		16V
C41	1-102-821-00	CERAMIC	360PF	5%	50V
C42	1-162-199-31	CERAMIC	10PF	5%	50V
C43	1-162-282-31	CERAMIC	100PF	10%	50V
C44	1-162-839-11	CERAMIC	0.01uF	10%	16V
C45	1-162-282-31	CERAMIC	100PF	10%	50V
C46	1-162-282-31	CERAMIC	100PF	10%	50V
C47	1-162-306-11	CERAMIC	0.01uF	30%	16V
C60	1-162-199-31	CERAMIC	10PF	5%	50V
C61	1-162-199-31	CERAMIC	10PF	5%	50V
C64	1-162-306-11	CERAMIC	0.01uF	30%	16V
C65	1-162-306-11	CERAMIC	0.01uF	30%	16V
C68	1-162-294-31	CERAMIC	0.001uF	10%	50V
C69	1-162-294-31	CERAMIC	0.001uF	10%	50V
C70	1-162-306-11	CERAMIC	0.01uF	30%	16V
C71	1-162-306-11	CERAMIC	0.01uF	30%	16V
C72	1-128-057-11	ELECT	330uF	20%	6.3V
C73	1-162-294-31	CERAMIC	0.001uF	10%	50V
C75	1-136-171-00	MYLAR	0.33uF	5%	50V

Ref. No.	Part No.	Description			Remark
C77	1-130-483-00	MYLAR	0.01uF	5%	50V
C80	1-162-306-11	CERAMIC	0.01uF	30%	16V
C82	1-162-294-31	CERAMIC	0.001uF	10%	50V
C92	1-162-294-31	CERAMIC	0.001uF	10%	50V
C94	1-162-306-11	CERAMIC	0.01uF	30%	16V
C97	1-104-666-11	ELECT	220uF	20%	25V
		< FILTER >			
CF2	1-760-738-61	FILTER, CERAMIC			
CF3	1-781-171-11	DISCRIMINATOR, CERAMIC			
		< COMPOSITION CIRCUIT BLOCK >			
CFT1	1-233-885-11	ENCAPSULATED COMPONENT (AM IF)			
		< CONNECTOR >			
CN1	1-770-519-31	CONNECTOR, FFC/FPC 11P			
		< TRIMMER >			
CT1	1-141-603-21	CAP, ADJ (FM TRACKING)			
CT3	1-141-601-21	CAP, ADJ (AM TRACKING)			
		< DIODE >			
D1	8-719-050-72	DIODE KV1370NT			
D2	8-719-050-72	DIODE KV1370NT			
D3	8-719-050-69	DIODE KV1520N			
D4	8-719-991-33	DIODE 1SS133T-77			
D5	8-719-991-33	DIODE 1SS133T-77			
D7	8-719-991-33	DIODE 1SS133T-77			
		< FILTER >			
FL1	1-236-711-21	FILTER, BAND PASS			
		< IC >			
IC1	8-759-644-86	IC TA2104BN			
IC2	8-759-549-57	IC LC72137-D			
		< COIL >			
L1	1-409-904-31	COIL, FM OSC (FM TRACKING)			
L2	1-409-905-31	COIL, FM RF (FM FREQUENCY COVERAGE)			
L3	1-754-100-11	ANTENNA, FERRITE-ROD (MW) (AM TRACKING)			
L4	1-411-234-21	COIL, AM OSC (AM FREQUENCY COVERAGE)			
L6	1-414-142-11	INDUCTOR	1uH		
L10	1-410-521-11	INDUCTOR	100uH		
L11	1-410-521-11	INDUCTOR	100uH		
L40	1-410-509-11	INDUCTOR	10uH		
L90	1-414-142-11	INDUCTOR	1uH		
		< TRANSISTOR >			
Q13	8-729-036-77	TRANSISTOR KRC107M			
		< RESISTOR >			
R2	1-249-413-11	CARBON	470	5%	1/4W
R7	1-249-429-11	CARBON	10K	5%	1/4W
R9	1-249-411-11	CARBON	330	5%	1/4W
R11	1-247-843-11	CARBON	3.3K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R13	1-249-421-11	CARBON	2.2K	5%	1/4W
R16	1-247-807-31	CARBON	100	5%	1/4W
R30	1-249-431-11	CARBON	15K	5%	1/4W
R31	1-247-843-11	CARBON	3.3K	5%	1/4W
R32	1-249-441-11	CARBON	100K	5%	1/4W
R33	1-247-887-00	CARBON	220K	5%	1/4W
R40	1-247-887-00	CARBON	220K	5%	1/4W
R41	1-249-429-11	CARBON	10K	5%	1/4W
R62	1-247-831-91	CARBON	1K	5%	1/4W
R64	1-249-437-11	CARBON	47K	5%	1/4W
R66	1-247-831-91	CARBON	1K	5%	1/4W
R67	1-249-437-11	CARBON	47K	5%	1/4W
R71	1-249-421-11	CARBON	2.2K	5%	1/4W
R73	1-249-425-11	CARBON	4.7K	5%	1/4W
R74	1-249-421-11	CARBON	2.2K	5%	1/4W
R76	1-247-831-91	CARBON	1K	5%	1/4W
R91	1-249-393-11	CARBON	10	5%	1/4W
		< VIBRATOR >			
X1	1-781-592-11	VIBRATOR, CRYSTAL (32.768kHz)			
**********					
		MISCELLANEOUS			
		**********			
14	1-791-611-11	WIRE, PARALLEL (FFC) (11 CORE)			
15	1-791-612-11	WIRE, PARALLEL (FFC) (21 CORE)			
21	1-791-613-11	WIRE, PARALLEL (FFC) (17 CORE)			
73	1-533-233-31	HOLDER, FUSE			
76	1-529-505-11	SPEAKER (12X6cm)			
119	1-791-614-11	WIRE, PARALLEL (FFC) (21 CORE)			
153	1-690-530-81	LEAD (WITH CONNECTOR)			
158	1-660-965-11	SLIDE FLEXIBLE BOARD			
⚠159	X-4950-060-1	OPTICAL PICK-UP DAX-01A2			
ANT1	1-754-090-11	ANTENNA, TELESCOPIC			
⚠F901	1-533-420-11	FUSE, GLASS CYLINDRICAL(DIA.5) (5A/125V)			
IC302	8-759-333-16	IC LA4705NA			
IC601	8-759-445-59	IC BA033T			
LCD801	1-803-794-11	DISPLAY PANEL, LIQUID CRYSTAL			
M701	A-3303-403-A	MOTOR ASSY (SLED) (INCLUDING GEAR)			
M702	A-3303-971-A	MOTOR ASSY, TURN TABLE (SPINDLE)			
Q601	8-729-209-15	TRANSISTOR 2SD2012			
S701	1-571-099-21	SWITCH (1 KEY) (LIMIT)			
SP101	1-529-504-11	SPEAKER (8cm) (L-CH)			
SP201	1-529-504-11	SPEAKER (8cm) (R-CH)			
**********					
		ACCESSORIES & PACKING MATERIALS			
		**********			
⚠	1-418-655-11	ADAPTOR, AC (AC-E700)			
	1-791-680-11	CORD, CAR BATTERY			
	3-040-349-01	WASHER (BELT)			
	3-040-350-01	SCREW, BELT STOPPER			
	3-040-351-01	BELT			
*	3-703-044-26	LABEL, CAUTION			
	3-867-834-11	MANUAL, INSTRUCTION (ENGLISH)			
	3-867-834-21	MANUAL, INSTRUCTION (FRENCH) (CND)			
**********					

Ref. No.	Part No.	Description	Remark
		**********	
		HARDWARE LIST	
		**********	
#1	7-624-106-04	STOPRING 3.0, TYPE -E	
#2	7-627-850-17	SCREW,PRECISION +P 1.4X2.5	
#3	7-682-549-04	SCREW +B 3X10	
#4	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
#5	7-685-549-19	SCREW +BTP 3X14 TYPE2 N-S	
#6	7-685-647-79	SCREW, TAPPING +BV 3X10	
#7	7-685-648-79	SCREW, TAPPING +BV 3X12	
#8	7-685-649-79	SCREW, TAPPING +BV 3X14	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

9-927-185-11

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Personal Audio Division Company

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